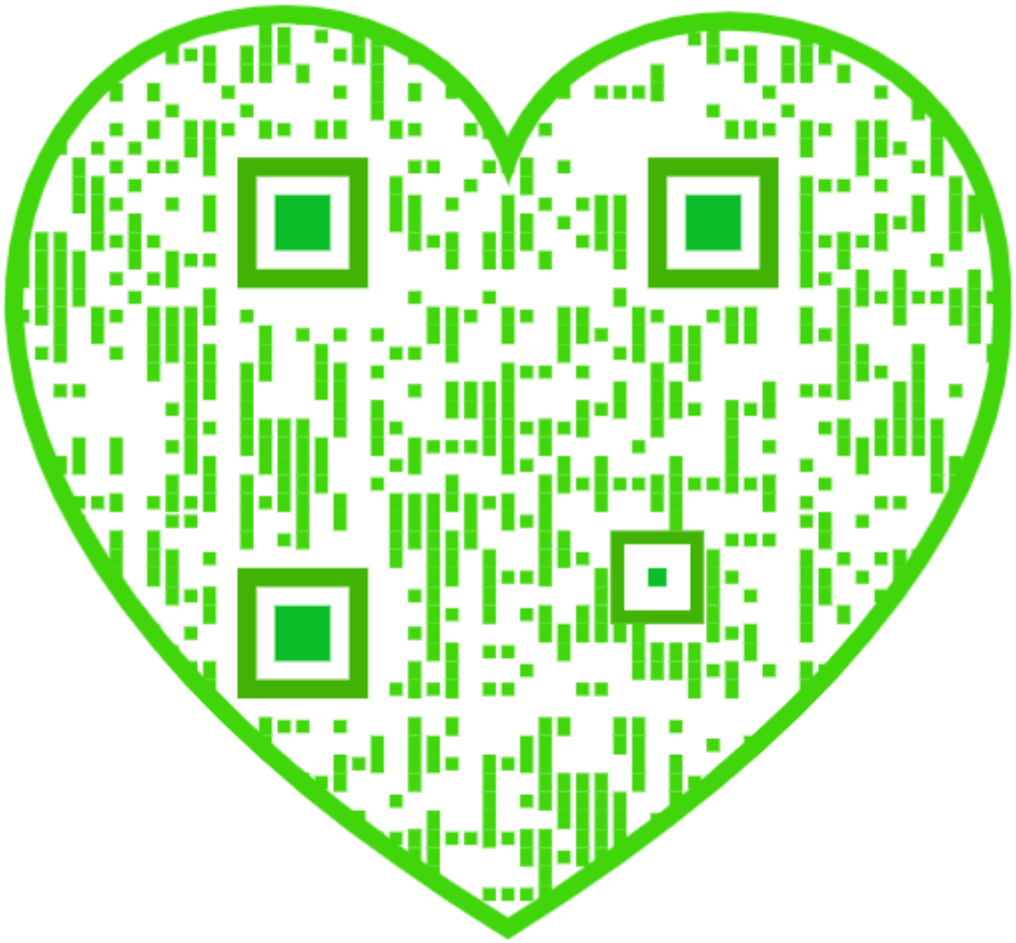

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OLD ENGLISH GLASESS.

1.—BEADS—EGYPTIAN, ROMANO-EGYPTIAN.

OLD ENGLISH GLASSES.

AN ACCOUNT OF

GLASS DRINKING VESSELS IN ENGLAND,

FROM EARLY TIMES TO THE END OF THE EIGHTEENTH CENTURY.

WITH INTRODUCTORY NOTICES, ORIGINAL DOCUMENTS, ETC.

BY

ALBERT HARTSHORNE,

FELLOW OF THE SOCIETY OF ANTIQUARIES.

"Tout passe, tout casse . . . "

ILLUSTRATED.

EDWARD ARNOLD

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DEDICATED

BY

GRACIOUS PERMISSION

TO

HER MAJESTY

THE QUEEN.

PREFACE.

In the following work, which comprises the history of a subject never before undertaken for England, the author has primarily endeavoured to provide information concerning drinking-glasses and glass-making in this country from Roman times to 1800. Dealing first with objects in vitreous pastes found in Britain, the ὑαλᾶ σκεύη of Strabo, the aggry beads,—some of them remnants, apparently, of Phœnician commerce,—Roman mosaic beads, and their *quasi*-imitations the beads of Anglo-Saxon times, are successively touched upon. The evidences of glass-furnaces in Britain during the Roman domination are spoken of; and while the large and varied number of drinking-vessels of Anglo-Saxon times are discussed historically, an endeavour is made for the first time to bring them into order, to classify, and to date them. The imported Oriental glasses—"à la façon de Damas," "à la Moresque"—are not overlooked, and the collateral rise and progress of painted glass in England, from the middle of the twelfth century to the time of the English painted windows of the Chapel of King's, of the first quarter of the sixteenth, is shown. Testimonies are adduced indicating the continuation of the manufacture of glass drinking-vessels in England during this long period, and up to the middle of the sixteenth century, illustrated by the evidence of inventories and a few actual vessels.

The introduction of the glasses "façon de Venise" to England, the arrival of foreign glass-makers, the opening of the monopoly system, and the enormous development of glass-making in this country, both in "hollow ware" and "table" glass—comprising the period between 1549 and 1660—has now for the first time been drawn up and fully set forth from State Papers. Within this period is also included the first granting of concessions for glass-making to foreigners, and to English men of position, the introduction of coal fuel, and the consequent closing of the pots, the dawning of the use of lead, the prohibition of wood, the

banning of foreign glass, the granting of limited Letters Patent, the long rule of Mansel, and the story of his struggles and difficulties. Extracts from Household Inventories from 1612 to 1649 illustrate the State Papers, and an account is then given of glass of different periods and kinds, and its constituents.

Continuing the use of the State Papers from 1662 for a further period of a hundred years, the definite and systematic inauguration of "flint glass" or "glass of lead" and its gradual perfecting are shown to have taken place; and the account of the large importations from Venice, during the third quarter of the seventeenth century, of glasses made to the order of English merchants to compete with those of home manufacture, is set forth from original documents and drawings alone. The character of the English glasses of this time is demonstrated by examples which have been identified.

Up to the end of the seventeenth century the main history has been drawn from documents, with illustrative glass vessels few and far between. The turning-point is now reached, and the sources of information are reversed: the glasses increase, and the documents diminish both in number and consequence, so that long before the middle of the eighteenth century the story is disentangled by the evidence of the glasses alone.

Having finally come into the open, the task is undertaken of organising an exceeding great army of items, long since disbanded and dispersed. By striking them into sixteen groups, their relative places in the social history of the eighteenth century have now been recovered, and it is believed that by the aid of the terminology so formulated any eighteenth-century glass may readily have its position assigned to it by the collector. Accuracy of classification has been assured as to some groups by the accident of dated examples, while the association of items in others with political movements, temporary public feeling, or special social habits, has suffered their dates to be also ascertained, usually with tolerable exactness, often with certainty. Thus the varieties of the baluster-stemmed, the air-twisted, the opaque-twisted, and the cut-stemmed glasses are respectively restored to their positions in the long history.

A chapter is devoted to Jacobite Glasses whose story up to the present time has, for obvious reasons, been somewhat of a mystery, and an account is given of Irish Glasses. A final chapter deals with the Drinks, the Wine, and the Ardent and Cordial Waters, from Anglo-Saxon times to the end of the eighteenth century, based entirely upon documentary evidence.

The work is preceded by Introductory Notices concerning glass-making in Egypt, and in Classic, Merovingian, and Mediaeval times; Venetian Glasses are

treated of, and the origin and progress of glass drinking-vessels in the United Provinces is set forth now for the first time in England, with the aid of a large series of Low Country documents only of late years made available for use; the rise, advance, and decay of that remarkable art movement, the introduction into the Low Countries by Venetians and Altarists of glasses "façon de Venise," being shown. The course of the glasses of Western Germany, of Silesia, Bohemia, and South Germany is similarly exhibited; the Igel, Roemer, Krautstrunk, Passglas, Willkomm, and all kinds of Humpen illustrated, and their origins and varieties touched upon. The progression of glass-making in France, province by province, under the influence of Altarists and Venetians is in like manner succinctly given. It is not pretended that these notices are anything more than slight sketches. They give merely the outlines of a large subject with which it is desirable to be somewhat acquainted, in order to a proper realisation of the course of glass-making in England, and the influence of English glass in some of the regions implicated.

Finally, an Appendix contains the text of the Patents and State Papers, which have served to elucidate a rather tangled chapter of glass history, together with Original Documents, Inventories, etc., for England; the entire work being bound together by references to the whole of these records and to the text of the Introductory Notices, as well as to the authorities quoted throughout, in a series of 830 footnotes.

The author is under no illusion as to the imperfections of a work which has of necessity touched upon so many points in an extended and often complicated survey. But he believes that those persons best able to realise the difficulties inseparable from the efforts of a pioneer in a field not heretofore explored, as far as the English story is concerned, will look with toleration upon shortcomings which can hardly fail to be associated with such initial attempt to piece together infinite details for an intelligible account. And, inasmuch as he may venture to say, with perfect truth, that no pains have been spared to collect widely-scattered materials, both as regards information and illustration; to verify, as far as possible, every statement and date; and to endeavour to ensure absolute accuracy in his drawings, he would fain hope (like the great Lexicographer) at least to escape reproach in these respects.

The gulf that divides us socially from the old world of the Georges is already very wide and striking, and it would appear that the account now attempted of the glasses of the eighteenth century has by no means been undertaken too soon. The greater part of them were withdrawn from use nearly a hundred years ago,

and the knowledge of the rapid destruction of the glasses of the last century, the general disappearance from view in late years of these objects once so familiar in old shops, as well as their known broad scattering in distant parts of the Empire, and in the New World, as cherished tokens from the mother country, has led to the conclusion that the compilation of the present account, and the illustration of sufficient types of an array of drinking-vessels formerly so abundant, would shortly have become a matter of considerable difficulty, and that the opportunity would have soon passed away for recording information as to which posterity might naturally desire to be informed.

It will be at once recognised that with advancing time the varieties of the eighteenth-century glasses will in their turns, like the old silver, the pictures, and the furniture, take their places as historical relics and antiquities, and pass eventually by natural degrees from the condition of scarce to that of rare, and finally—long hence—of unique, of their different kinds. Such has been the sequence of the English-made glasses of Mansel's period, and of Greene's intrusive rivals of the home industry of Charles II.'s time, to look no further back.

To the glasses of the eighteenth century the attention of collectors must be henceforth mainly directed, because those of a time previous to 1700 are not likely often to fall within their reach; many, indeed, such as the Rose glasses and those of the earlier Jacobite period, already belong to the scarce series.

With regard to the Illustrations, a few words may be convenient. The author is responsible for the outlines of one-half of the full-size plates; sketches for others have been furnished by the kindness of friends; others, again, have been taken from well-known archaeological works, and several from the actual glasses in the British Museum, by Mr. W. S. Weatherley, who has further drawn the entire number in lithography. To this accomplished artist the author is under the greatest obligation for his admirable representations of a series of objects fashioned in a material most difficult to portray. For the whole of the 366 blocks in the letterpress the author is accountable. Those in the Introductory Notices are various reductions by photography from his full-sized drawings or rough sketches, sixteen only being copied from antiquarian works, and the rest taken from actual examples and pictures in museums on the Continent. The Anglo-Saxon glasses in the English account have been obtained from Akerman's *Pagan Saxondom*, *Inventorium Sepulchrale*, and other standard books. A dozen following these have been derived from as many sources, while the remaining 208 blocks are reductions from the author's full-sized drawings to a uniform

scale of one-third of the originals. With such a number this course was inevitable, but thanks to the care with which Mr. R. Paul has traced in ink the whole of the author's pencil drawings for photographic treatment, their distinctness has in no way suffered by the reduction. Full-size examples of nearly every group of eighteenth-century English glasses are included among the plates. Thus, it is hoped, their fragile forms will at least be rescued from oblivion.

During the course of an inquiry that has extended over several years, the author has had cause to feel grateful to many friends and correspondents. His special acknowledgments are due to Msgr. de Béthune, of Bruges; Herr Hans Bösh, Director of the Museum at Nuremberg; Herr A. von Czihak, Director of the Art School at Königsberg; the venerable Geheimer Rath Dr. von Hefner Alteneck, of Munich; Jhr. B. W. F. van Riemsdijk, Director of the Rijks Museum at Amsterdam; and Mons. H. Schuermans (Hon. F.S.A.), Premier Président de la Cour d'Appel, at Liège. The author is also particularly under obligation to Mr. H. Syer Cuming; Dr. Fitz-Patrick, M.A., M.D.; Miss F. Lloyd Fletcher; Mr. E. W. Hulme; Prof. W. M. Flinders Petrie; Mr. C. H. Read, F.S.A.; Mr. J. Singer; Sir G. R. Sitwell, Bt., F.S.A.; Lord Torphichen; Sir A. Vicars, F.S.A., Ulster King of Arms; Miss Whitmore Jones; Mrs. W. Wilmer; Mr. R. H. Wood, F.S.A.; and the Dowager Lady Williams Wynn. To an old friend, Sir A. Wollaston Franks, K.C.B., P.S.A., his indebtedness is of a wider character, since without the encouragement and sympathy of that distinguished antiquary, the present work on Old English Glasses might hardly have been undertaken at all.

A. H.

Bradbourne Hall, Derbyshire.
January 1897.

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INTRODUCTORY NOTICES.[1]

GLASS-MAKING.

I.—EGYPTIAN.

That myths and legends should hover and cluster in classic times about the story of the first dawnings of an art which, beyond all others, has conferred surpassing benefits upon mankind—whether we consider it in its highest capability, in its relation to our increased knowledge of the worlds in the firmament of heaven, to the diffusion of light in our dwelling-houses, or to the cheap and cleanly vessels which it provides for our constant domestic requirements[2]—is as characteristic of classical sentiment as that such romances should be copied and handed down by later writers.

Pliny first gives us the picturesque account that was reported of certain Phoenician merchant mariners returning from Egypt to Syria with a cargo of natron, or carbonate of soda. Having landed on the sandy beach of the river Belus, under Mount Carmel, and finding no stones proper for the purpose, they rested their cooking-pots on blocks from their own freight. It may be recalled that the series of natron lakes in the barren desert of the Natron Valley which borders upon Lower Egypt would have furnished material for the particular cargo, natron from these sources being much employed in early times both in Syria and in Egypt for bleaching linen as well as for other uses. The story continues that the natron blocks, becoming fused by the heat of the fire, caused the alkali to form a flux for the silicious

[1] The author takes the first opportunity of acknowledging his indebtedness, for information concerning the art of glass-making in ancient and in mediaeval times, to the researches of the late Mr. Alexander Nesbitt, as set forth in his Notes on the History of Glass-making, forming the Introduction to the Catalogue of the Slade Collection, and to the slightly fuller Introductory Notice by the same accomplished antiquary which accompanies the Catalogue of the Glass Vessels in the South Kensington Museum.

[2] "Who, when he saw the first sand or ashes by a casual intenseness of heat melted into a metallic form, rugged with excrescences, and clouded with impurities, would have imagined that in this shapeless lump lay concealed so many conveniences of life as would in time constitute a great part of the happiness of the world? Yet by some such fortuitous liquefaction was mankind taught to procure a body at once in a high degree solid and transparent which might admit the light of the sun, and exclude the violence of the wind; which might extend the sight of the philosopher to new ranges of existence, and charm him at one time with the unbounded extent of the material creation, and at another with the endless subordination of animal life; and what is yet of more importance, might supply the decays of nature, and succour old age with subsidiary sight. Thus was the first artificer in glass employed, though without his own knowledge or expectation. He was facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures; he was enabling the student to contemplate nature, and the beauty to behold herself."—Dr. Johnson, *Rambler*, No. ix.

sand of the river, that a liquid and transparent stream was the result, and that such was the origin of glass.[1]

It will be noticed that Pliny mentions the matter as a report. Tacitus makes the same statement, leaving out the cooking-vessels; and Flavius Josephus repeats it, substituting the Children of Israel for the Phoenician merchants, and somewhat varying the incidents.

On the other hand, it is difficult to understand how substances which at the present day can only be fused in special furnaces at a heat of from 1832 to 2732 Fahr. could have become liquefied at an open cooking fire. The story must be taken for what it is worth, but it is well known that there are few myths, legends, or reports that have not some basis of truth.[2]

The excavations made in the early part of 1894 by Professor Petrie on the site of Koptos, thirty miles north of Thebes, disclosed for the first time remains of remote prehistoric Egypt. It is impossible to say whether a cognisance of the production either of glazes or of glass was brought into Egypt by primeval settlers from the sacred land of Punt in South-Western Arabia. The extent of primitive Egyptian civilisation as revealed at Koptos does not point to such a technical advance. The art may, indeed, have had its dawning in a civilisation of hoary ages more than seven thousand years ago, when the *Book of the Dead*, with its high religious ideal, was even then venerable, and before remote antiquity had begun its course. These are, truly, distances in time which are almost as difficult for an ordinary mind to grasp as are those which astronomers have revealed in space. But, given the knowledge of fire, the accidental production of a glaze might have arrived at any moment. Nevertheless it would, in all probability, be to the artistic period of the fourth dynasty (3998-3720 B.C.) that the introduction of glass-making may be ascribed; and one is tempted to think that there need be no reasonable doubt that it then had its origin in the furnaces of the potters at this comparatively late period.[3]

With respect to the manipulation of glass for vessels by the Egyptians, it has hitherto been considered as settled that the blowing tube was used, and the objects fashioned with it much as at the present day. In illustration of this practice the paintings at Beni Hassan, as given by Wilkinson, of men blowing at or into a fire, through tubes with a lump depicted at their ends, have been adduced (Figs. 1, 2). Allowing for a certain amount of conventionalism in these pictures, both as to the action of the men and the character of the fire, they still are by no means convincing, and on examining the Egyptian vases of ornamental glass—often called Phoenician, and which greatly resembled them—it is apparent that they have not been blown, but moulded by hand with rude tools, decorated and "patted" into shape, the interior being manipulated with a piece of wood (Figs. 3, 4). It is impossible that the paintings can

[1] "Fama est, appulsâ nave mercatorum nitri cum sparsi per littus epulas parerent, nec esset cortinis attolendis lapidum occasio, glebas nitris è nave subdicisse, quibus accensis permixtâ arena littoris, translucentes novi liquoris fluxisse rivos, et hanc fuisse originem vitri."—Pliny xxxvi. 65.

[2] Yet who would not shrink from the task of attempting to find even a semblance of such basis with regard to the childish story of Petronius about malleable glass, which Pliny, Dion Cassius, and others have repeated with no more care for veracity than is shown by a monk of the Middle Ages when the advantage of his House is in question, or by a scandalous chronicler of the eighteenth century.

[3] The man who first noticed the vitrification of certain substances brought about by fire may have been any potter at his kiln, struggling, as in De Foe's capital picture of Robinson Crusoe's efforts, to make him a pot; but the real discoverer was he who first saw that by blowing into the liquescent substance through a tube vessels could be fashioned out of it. That man is more likely to have been a Phoenician than an Egyptian.

be intended to represent the manufacture which the character of the glass vessels themselves evince, because blowing is the conspicuous action in the pictures; but it is probable that metal working is intended, much as it is primitively practised at the present day by wandering silver-

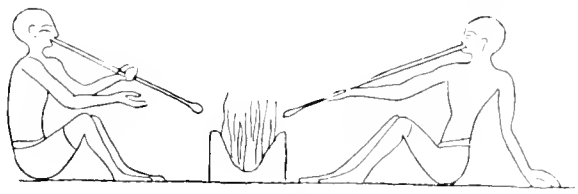


Fig. 1.

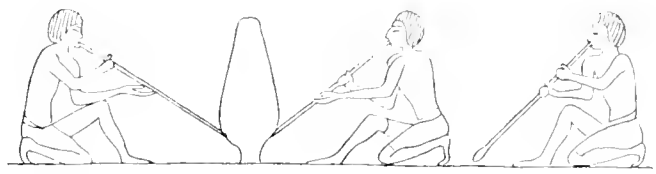


Fig. 2.

smiths in the Punjaub, and that the lumps at the ends of the tubes are of clay to obviate the burning of the hollow reeds. It is fair to give a third illustration from M. Garnier's book, taken from Cailliaud, but again it would be difficult to indicate exactly what process is intended to be shown by it (Fig. 5). It is very doubtful whether there was any blown glass in Egypt before Roman times.

The city of Tel-el-Amarna in Upper Egypt was excavated by Professor Petrie in 1892. This was a place entirely built by Amenhotep IV. in twelve years as a centre for his great revolution in religion and art, just before the middle of the eighteenth dynasty—about 1400 B.C. The new system and the new place were swept away within a generation after the death of Amenhotep, who reigned only eighteen years. Of particular interest in the present inquiry are the examples of glass that were found, every stage of glass-working being also illustrated by the fragments that were unearthed on this unique historic site,—crucibles, samples taken out of them, opaque and partially clear glass, in rod, strip, thread, and tube form, for decorating the vases, and wound round wire for making beads, some of which were glazed and some in open work, and cut and engraved with hieroglyphics. Besides these were quantities of portions of glass vases ornamented in various patterns, in red, blue, green, and yellow, and coloured rods placed together in designs drawn out for use in sections as inlays—an art pushed to the furthest point by the Romans long after. All these objects are of the highest interest from the circumstance and precise date of their manufacture.

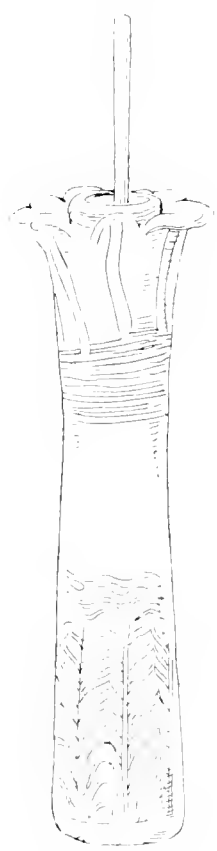


Fig. 3. (Full size.)

Fig. 4. (Full size.)

With regard to beads, they had their origin in the remote ages of the world in the desire of savage men and women to ornament themselves with coloured stones, pebbles, and shells which they found so shaped naturally that they could be readily suspended from their bodies. By a spontaneous transition these led to the artificial piercing of soft stones of a particular kind, colour, and value, and to their subsequent smoothing by attrition, and, later, by

cutting and polishing. Such was probably the course as to stone beads in Egypt, where the earliest beads of vitreous paste are of the fifth dynasty, in blue and white. In the general treatment of the latter, they follow that which obtained with regard to stone beads, the earliest examples being smooth and the latest cut. By the end of the eighteenth dynasty (1587-1327 B.C.) the art was fully developed, as the pendent eye beads and other pendent beads show; following these we have glazed-ware beads, bugles, pendent figures of divinities, and sacred beasts; and in the end, under Roman influence, millefiori, zigzagged, scribbled, waved, and spotted beads, the decorations being in white, yellow, red, and blue;

FIG. 5.

and square, oblong, fluted, turbinated, gimmal or dumb-bell, blackberry, cut, and faceted beads, well known from Roman examples that have been found in Britain. Moreover, the tombs and the soil of Egypt have surrendered an infinite quantity of glazed pottery or opaque glass paste figures, mystic eyes, eye plaques, scarabaei and ornaments, besides beads of brilliant turquoise blue, dusky green, or shades of buff (Plate 1).

It may be inferred that there was considerable resemblance between the glass manufacture of Egypt and that of Phoenicia, from the accounts left us by Herodotus—who does not appear, however, to have been fully aware of the real nature of glass—Pliny, and Theophrastus, of great statues and obelisks in both countries, of green glass, described as of emeralds, as well as from observation of examples known to be the productions of the respective countries. Pliny also tells us that a small spot at the mouth of the river Belus furnished sand which has sufficed to produce glass for many centuries. The Venetians are known to have imported this sand in later times.

Following in date the later Egyptian works of the twenty-third dynasty, seems to be a vase of transparent greenish glass from Nineveh, now in the British Museum. On one side a lion is engraved and a line of cuneiform characters containing the name of Sargon, King of Assyria, 722-704 B.C. There is not sufficient material for the formation of a decided opinion as to the extent to which glass-making was carried in Assyria, but this vessel has extreme value from being the earliest known piece bearing a date. Many of the specimens found by the late Sir Henry Layard at Nineveh may apparently be referred to the Roman colony of Niniva Claudiopolis.

II.—PHOENICIAN.

The earliest productions of the Phoenicians in the art of glass-making appear to be the well-known and widely-distributed coloured or "aggry" beads. Their occurrence in such distant parts of the then recognised world points to barter between the merchants

of Phoenicia and the barbarians, a kind of commerce still carried on at the present day through the medium of Venetian beads. It is, however, probable, and seems, indeed, to be the natural result of circumstances, that many of the so-called Phoenician beads belong to periods later than the flourishing times of Tyre and Sidon. Strabo, in words that are somewhat ambiguous, speaks of glass in various forms being imported into Britain in the first and second centuries.[1]

It has been stated that glass-making was established at a very remote period in Sicily, the Islands of the Archipelago, and in Etruria; it is possible, but from the close resemblance to each other of the little vases usually called Greek, that are found in tombs in the countries whose coasts are washed by the Mediterranean, it seems more likely that they are Phoenician, and produced in cities not widely separated from each other.[2] The vases of this class have usually the form of alabastra, or of amphorae, the prevailing colour being deep transparent blue; not infrequently the body of the vessel is pale buff to white, occasionally deep green, and in rare cases red. In almost every instance the surface is ornamented in chevrony lines, or in bands of white, yellow, or turquoise blue; in other examples the entire surface is so ornamented, the character of decoration which was common both to Egyptian, Phoenician, and Romano-Egyptian vessels recalling in a more brilliant degree some of the humble marbled papers of bookbinders of the latter part of the last century. The high value that was set upon these vessels by the Greeks and the Etruscans is sufficiently indicated by the stands of gold which were provided for such of them as, having a pointed base, required support (Fig. 6). A golden stand of this kind is in the Slade Collection, and another one, found with an amphora, is in the British Museum. Examples of these vases have been discovered associated with objects of a character which indicates a time not earlier than the third or fourth century before Christ. A great quantity of glass vessels, but chiefly colourless, and doubtless due to the colonisation of Cyprus by the Phoenicians, has been discovered within the last few years in that island. Whatever may be the period of the earliest of these antiquities, they do not seem, as in the case of the coloured vases just alluded to, to have been met with in tombs of a later date than the Christian era.

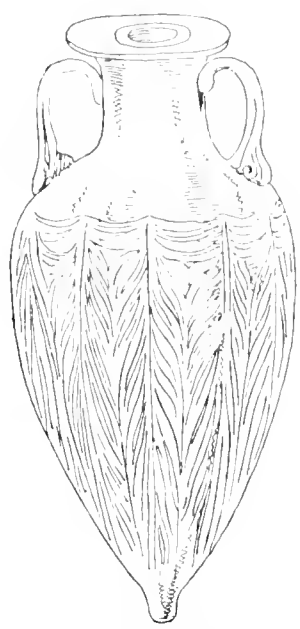


FIG. 6. (Two thirds.)

[1] His words are: *τέλη τε οὕπως ὑπομένουσι βαρέα τῶν τε εἰσαγομένων εἰς τὴν Κελτικὴν ἐκεῖθεν καὶ τῶν ἐξαγομένων ἐνθένδε (ταῦτα δ' ἔστιν ἐλεφάντινα ψέλια καὶ περιαυχένια καὶ λιγγούρια καὶ ὑαλᾶ σκεύη καὶ ἄλλος ῥῶπος τοιοῦτος), ὥστε μηδὲν δεῖν φρουρᾶς τῆς νήσου.*—Lib. iv. 5, 3. "They, *i.e.* the people of Britain, cannot bear heavy duties both on the imports into Keltica (*sc.* Gaul) from thence (*ἐκεῖθεν*) and on the exports from Keltica hither (*ἐνθένδε*) which are ivory bracelets and necklaces, amber, vessels of glass (*ὑαλᾶ σκεύη*), and other such small wares, so that the island hardly needs a guard." The language admits of an interpretation that vessels of glass were both exported and imported; but the use of the word *ἐνθένδε* (in opposition to *ἐκεῖθεν*) immediately before the reference to the ivory, etc., implies that those articles were imports to Britain from Gaul.

[2] Introduction, *Slade Catalogue*, p. vi.

III.—GREEK.

The Greeks do not appear to have much cultivated the art of glass-making before Christian times. Happily, certainly, on the one hand, for mankind, the nation gifted beyond all others of antiquity preferred to work in clay, and to fix upon the cold and plastic substance, with the tenderest gradations of the purest forms, the evidence of that surpassing genius which had been attained, as the highest of all art development must be, by the gradual labour of generations of artists. Nevertheless, on the other hand, it must ever be matter for regret that the Greeks did not, in their best periods, bend their transcendent powers to the manipulation of glass, the material which beyond any other gives instant form to the bright fancies of individual intellect, resigns itself with the utmost freedom to the dictates of sudden inspiration, and crystallises the most fleeting creations of the mind; and the world, lacking glass from the Greeks of the great age, remains sadly poorer in consequence.[1]

The earliest productions in vitrified pastes and glass in all countries naturally took the form of personal ornaments, beads, and inlaid decorations in jewellery. And, similarly, vitrified decorations are found in architecture and sculpture, at least in so far as Greece is concerned, as is shown by the blue glass inlaid in the capitals of the portico of the temple of Minerva Polias, on the Acropolis at Athens, of the best period of Greek art. Within the last few years the broken fragments of buildings, sculptures, etc., the effects of the sack of Athens by the Persians in 480 B.C.—which had been utilised by the victorious Greeks, after the defeat of Xerxes in the following year, for the extension of the plateau of the Acropolis, when they began to rebuild their public monuments—have been thoroughly excavated and examined with most important historical results. The eyes of the life-size or colossal and richly painted female figures, which date at least before 480 B.C., are usually inlaid in glass enamel or crystal.[2] Pliny tells the quaint story of the marble lion with the brightly-shining emerald-green eyes of glass looking out from the headland in the island of Cyprus, which so terrified the tunnies in the fisheries that it became necessary to change or remove them.[3]

IV.—ROMAN.

Allusion has already been made to Romano-Egyptian glass; there can be no doubt that the Romans drew their first inspirations in glass-working from Phoenicia and Egypt. Both the fame and the products of the furnaces in those ancient lands had reached the Eternal City long before Imperial times, for the glass-houses of Sidon, and particularly of Alexandria, certainly supplied Rome with large quantities of their fragile wares. But to what extent the Romans themselves had imitated Egyptian and Phoenician models, or carried

[1] M. Garnier contrasts the moderate development to which glass-making had attained in Greece with the perfection of ceramic art—"ce que l'on peut attribuer sans doute à ce que le verre, avec les moyens de fabrication dont on disposait alors, se prêtait plus difficilement que toute autre matière à la décoration."—*Histoire de la Verrerie et de l'Émaillerie*, p. 22, edit. 1886.

[2] *Archæological Journal*, vol. xlvii. p. 347, Address by the late Prof. Middleton.

[3] *Nat. Hist.*, Lib. xxxvij. cap. 5.

on glass-making at all before the successive subjugation of Syria and Egypt, would not be an easy matter to pronounce upon; inasmuch as the traditional forms of such vessels as the *oenoche*, the *amphora*, or the *alabastron* were generally retained, serving as they did the same purposes as in earlier times, whether for the table, the toilet, or the interment, while precisely the same processes must have been used in their manufacture.[1] The difference between Egyptian and Phoenician glass vessels and those of Roman make is less a question of brilliancy of colours than of purity of form, and this is also a nice point which cannot be curiously discussed here. In any case the Roman, with his quick intelligence, must soon have become familiar with the processes taught him in their entirety, doubtless by chemists, artists, and artisans drawn from conquered Egypt and Syria; so that in a very short time the Roman students and workmen not only equalled the productions of earlier civilisation, but carried the art to a point which it had never before reached. In addition to these considerations the taste for objects of beauty was stimulated by the luxury and wealth of Rome, increasing so rapidly under the Empire; and the ordinance of Aurelian that glass should form part of the Egyptian tribute shows, as Mr. Nesbitt points out, that the manufacture and the importations into Rome continued in the latter part of the third century.

From the very nature of glass-making the art of an earlier blends almost imperceptibly into that of a later time, and this is true of the subject, with very few exceptions, throughout its whole course, from earliest to latest days; and hence the ever-present difficulty in suggesting anything closer than approximate dates to undated glass vessels of any period or country. The artificers have invariably used the same elementary materials, employed the same general procedure, and fashioned their work with precisely the same few and simple tools, to which the Roman first added the *mould;* and probably no other art has such a long and continuous record. It is a remarkable fact that there is no process in use at the present day which was not known to, and practised by, the Romans two thousand years ago, except only that of making large sheets of plate glass such as are so admirably produced at Saint-Gobain.[2] Triumphs of this kind in connection with the manipulation of glass the size of the Roman furnaces did not permit. In all other respects Pliny's description, "Ex massis (vitrum) rursus funditur in officinis, tingiturque. Et aliud flatu figuratur, aliud torno teritur, aliud argenti modo caelatur,"[3] is exactly applicable to modern operations.

The variety and beauty of Roman coloured glass is not less remarkable than the ingenuity and dexterity with which it was manipulated. It would appear that glass-making was, in Roman times, carried on at a great number of small furnaces; to this system may be partly attributed the wonderful diversity of the productions of the better kind, and it is doubtless owing to it that Roman glass is never, or hardly ever, free from numerous small bubbles and flaws, pure crystalline metal being the result of long-continued fusion in large pots.[4] It

[1] In the *Deipnosophistae*, or *Banquet of the Learned* of Athenaeus, Book XI., much curious information is given concerning the names of drinking-vessels of gold, silver, pottery, and wood, with quotations from ancient poetry concerning their special uses. It is incidentally stated, V. ii. p. 742, that "The men in Alexandria work crystal into various shapes of goblets." Athenaeus died A.D. 194. —See Translation, by C. D. Yonge, in 3 vols., Bohn, 1854.

[2] Under the guidance of M. Jules Henrivaux, to whom the practice of glass-making in France is so much indebted.

[3] *Nat. Hist.*, Lib. xxxvi. c. 26, § 66.

[4] From fifty to sixty hours are necessary for the air-bubbles to be driven off, and the mass to become homogeneous.—Apsley Pellatt, *Curiosities of Glass Making*, p. 48, edit. 1849.

should be borne in mind that glass at this period satisfied many of the wants which china supplies at the present day, and while it is the truth that the Romans made more use of glass than we do in the present age, and handled it with feeling as well as dexterity, it is a melancholy fact that, with all our technical advantages, we appear to be daily receding further and further from ancient artistic models; they are not to the taste of a utilitarian age from which natural artistic instincts have long since faded away.

In the luxurious Imperial times there was no lack of encouragement for art workers. Enormous prices were paid for masterpieces such as the Portland Vase—of which the value in artistic labour alone was set by Wedgwood at more than £5000, supposing always that a man could be found who could do it—the Naples and the Auldjo vases, to mention only one class, and this at a time when we know from fragments of others that even such precious objects as these were far from rarities. The world was not then, as now, filled with inferior things.

With regard more particularly to the coloured glass of the Romans, who in this respect appear to have had great chemical knowledge, the mosaic and variegated or millefiori glass takes a high place. Examples of it are well known, because from Rome, doubtless the principal place of its manufacture, it was exported to all parts of the wide empire; fragments have been found, for instance, in London exactly like those which excavation reveals in Rome. Of transparent colours in glass the Romans had at their command blue, green, purple, amber, brown, and rose; and of opaque, white, black, red, blue, yellow, green, and orange. There are of course many shades of both kinds of colours.[1]

The manufacture of mosaic glass was as follows:—Threads or canes of glass of different colours were arranged vertically in a pattern forming a geometrical figure, an arabesque, the half or the whole of a mask, a bird, or other object; or, more commonly, a mosaic pattern, usually with the view of forming a small cup. The mass being fused, and the air excluded by lateral pressure, the result was a homogeneous slab, which, when cut into veneers at right angles, laterally, or otherwise, would yield a number of uniform designs.[2] Again, the patterns were made upon a large scale in rod form, and being drawn forward when hot with a constantly reducing diameter, sectional pictures were thus produced, and at last so minute as to be quite beyond the power of the naked eye. This process was well known to the Egyptians, who also, like the Romans, employed the results in jewellery ornaments, the objects being generally embedded or cased in transparent or opaque glass. A vast number of cups, bowls, and paterae were formed in Rome of mosaic glass which had been cut into sections, placed edgeways in a *paraison* or body of semi-transparent glass, and blown and worked into the required form, with numberless resulting designs and patterns more easy to imagine than to describe, and of course appearing much the same on both sides of the vessel.

The Romans imitated precious stones in glass with great success; the onyx also, agate, and the favourite chalcedony, and porphyry, serpentine, and granites for pavements (*sectilia pavimenta*) and wall decorations; for which purposes slabs, respectively thick and thin, of coloured glass were also used, those for walls being frequently cut into shapes, and fitted together with the utmost care. Pliny tells us that the Roman glass-makers also imitated

[1] Introduction, *South Kensington Catalogue of Glass*, p. xxiii.

Perhaps the finest collection of Roman coloured glass in the world is that in the K.-K. Oesterr. Museum at Vienna, both as regards fragments and entire examples.

[2] Apsley Pellatt, *ut sup.*, p. 111.

murrhine—of which mysterious stone not a fragment has yet been discovered in Roman soil, at least not identified as such, nor has its counterfeit been recognised among the fragments of ancient glass.[1]

Perhaps in some respects more plentiful than the mosaic glass, though not so plentiful at this period, is the kind known as filigree, which is formed by the interlacing of bands and threads both of milk-white (*latticinio*) and coloured glass. Thus we find bands so placed in sections as to present a plaited pattern, or the strips simply laid side by side. In other cases threads of opaque white or yellow are twisted with clear glass, blue strings also occurring, pieces of gold-leaf being sometimes introduced between the layers; the component parts being thus built up and welded together, the vessel was worked to its completion. Under the names *vitro di trina*, *di filigrana*, *a ritorti*, and *a reticelli*, this process was carried to the utmost limits of perfection, and in a variety of ways long after by the Venetians, whose most notable efforts both in *millifiori* and *vitro di trina* in the sixteenth century must have been inspired by a close study of ancient examples, unless, indeed, they acquired the secrets and technical methods of the Romans, as is very doubtful, by uninterrupted transmission. Some of these processes will be briefly spoken of in their proper places, but it will at once be obvious that the varieties which could be brought about by the laying together and amalgamation of rods or strips of glass, plain, decorated, or coloured, and whether arranged in sections or lengths, and working them under heat into vessels, would easily produce a multitude of designs rivalling the number, and perhaps not always without the harshness of the variegated hues and ever-changing patterns of the kaleidoscope; such a variety, in short, that might almost baffle description.

The near approach which some of the Roman opaque coloured glass makes in appearance to porcelain, as has been suggested by a distinguished connoisseur,[2] recalls a similar approximation to, or rather declension from, china in the white enamel glass of Bristol of the latter half of the eighteenth century, painted by Michael Edkins. The extreme fragility of this beautiful glass ware caused its early and rapid destruction; and had it not been for the inquiries of a very few collectors and the researches of a specialist, its memorial would have perished with it.[3]

To return to the Romans. Allusion has been made to the Portland Vase and works of that character. These are examples of cased or cameo glass, doubtless the most beautiful objects which have ever been produced in glass. The process of manufacture consists simply in fashioning first the outer portion or case of a vessel which is set into a stand. An interior shell of a different colour is then blown into it, and the vase is shaped and finished in the usual way. In the special case of the Portland Vase the artist—and what an artist!—with his lapidary's wheel was now set to work, giving subsequently the finishing touches with a file of emery or adamant, and with, perhaps, the help of a diamond. The result of cutting away portions of the outer white surface of this precious object has been to produce the exact appearance of an onyx cameo. The number of the strata in vases of this character is not

[1] See *Proceedings Soc. Antiquar.*, April 20, 1893. *Remarks on Murrhine*, by Sir J. C. Robinson. Harrison in his *Description of England*, Book II., chap. vi., p. 147, edit. 1586, says—" . . . the ancient Murrhina vasa, whereof now no man hath knowledge."

[2] Sir J. C. Robinson, *Pro. Soc. Ant.*, *ut sup.*

[3] Hugh Owen, *Two Centuries of Ceramic Art in Bristol*, p. 379.

limited to two, though this is the most usual, and for all practical and artistic purposes a sufficient number. As many as five layers have been found in pieces of glass forming part of a vase.[1] Wedgwood pointed out, in 1786,[2] the ability with which the gifted artist of the Portland Vase had availed himself of the dark transparent blue ground for giving depth to the shadows, by cutting quite down to it; and similarly, it may be observed, by thinning the white until the blue shows more or less through, gradations of shades have been obtained with the happiest results.

Though not directly included in the scope of the present work, copies in glass of cameos and intaglios may be fitly alluded to here. They were produced in large quantities in Rome, and are found on the site of every considerable Roman town. They appear to have been made much in the same way as those by the Tassies and their followers in our own day, namely, by pressure in a mould when the metal was in a semi-liquid state, and for the most part to have been mounted as rings for persons who could not afford real stones. The cameos are frequently finished with the wheel, and are occasionally met with of large size. Some of these must have been used for the decoration of furniture, just as small plaques of Sèvres are employed by French cabinetmakers at the present day; or perhaps as ornaments for "horse-trappings," that convenient safety-valve of antiquaries for relics and ornaments which have no definite character. As works of art, glass cameos and intaglios have but slight merit, but value attaches to those intaglios which have been cast from the finest gems of their time, and have thus preserved authentic copies of designs of great beauty which have vanished.

Here may also be mentioned the process of inlaying upon a surface of glass, generally dark blue, figures of small objects, such as a bird, a leaf, etc., fine lines or fillets of gold marking the outlines and general forms; enamels of various colours were inserted in the spaces, and the whole submitted to the muffle furnace, with most delicate and beautiful results. The great interest of this process is the early examples which it offers of the *cloisonné* art, carried to so high a point at a later time in Byzantium.[3]

Another special treatment of Roman glass is that which is brought about by blowing the metal into a mould. Some of the vessels or ampullae belonging to this class are of very small size, from two to four inches in height; they vary in colour and belong to the Romano-Egyptian period. Many of them possess marked interest from having impressed upon them the names, or portions of the names, of their makers; one specially valuable portion of the handle of a sapphire-blue cup in the British Museum has stamped upon one side ΑΡΤΑϹ·ϹΕΙΔω, and on the other ARTAS. SIDON;[4] another fragment in the same repository bears the same stamps, as does also a greenish glass handle of a vessel in the K. K. Oesterreich. Museum in Vienna. In the Baierisches National Museum at Munich is a handle inscribed ΣϹΙΔω ΝΕΙΚωΝ; an example found at Syracuse bears the words ΕΙΡΗΝΑΙΟΣ ΣΙΔωΝΙΟΣ, and in this regard, particularly interesting, is a vase handle of amber glass in the British Museum bearing on one side the words ΕΙΡΗΝΑΙΟΣ ΕΠΟΙΗΣΕΝ, and on the other the bust of Caligula (37-41 A.D.), which serves to date all these examples.[5] There are several instances of portions of glass vessels bearing parts of the stamp of a Roman glass-maker. The comparison of the different pieces from widely distant localities has decided the reading as FIRMI HYLARI HYLAE.

[1] Apsley Pellatt, *ut sup.*, p. 140.

[2] In a letter to Sir W. Hamilton, quoted by Miss Meteyard in *Life of Wedgwood*, vol. ii. p. 577.

[3] Introd., *Slade Catalogue*, p. xviii.

[4] *Slade Catalogue*, p. 33.

[5] *Ibid.*

This was finally confirmed by a full example found at Weyden, near Cologne. Glass stamped with some part of the name Frontinus is not uncommon in Western Europe, particularly in France. Further examples might be adduced.

Among the vessels of blown glass those that bear the impress of masks and human faces are noteworthy. Naturally those of small size and thick glass have best withstood the onslaughts of time; bunches of grapes, dates, birds, etc., were also imitated. A vase in thin horny-tinted glass, $9\frac{1}{4}$ inches high, and bearing on one side a human face in such low relief that the outline of the vessel is hardly affected by it, is preserved in the Germanisches Museum at Nuremberg[1] (Fig. 7); hard by it is sheltered a bowl of the same sort of glass, 4 inches deep and 9 inches in diameter, rudely scratched with outlines of a man, dogs, hare, and stag, and bearing the inscription . . V MTVIS VIVAS. Small masks and various ornaments were also pressed into moulds and affixed to vases, or stamped on them, exactly as was done in glass-works all over Europe in the sixteenth and seventeenth centuries. Bottle-shaped cages of wire were also used by the Roman glass-blowers, giving the kinkled appearance to the surface of a vessel; and a beautiful and later development of this practice is shown by a silver vase in the British Museum, of which the sides are pierced with numerous oval holes at set intervals; into this outer shell or case, which takes the same relative place as the exterior white shell in the Portland Vase, a lining of blue glass has been blown so that it protruded slightly through the openings, the effect being similar to that of a silver cup studded with sapphires.[2]

FIG. 7.
(One quarter.)

Not less noteworthy than the vases from Sidon are the rare and curious Chariot Race and Gladiator cups, apparently of the second century, blown, as it seems, in earthenware moulds —they are not sharp enough to imply moulds of metal. They are of rude art, quite distinct from that of Italy, and of a particular shape, necessitated to a certain extent by the demands of the reliefs upon them. These glass vessels have been found in Belgium, Germany, France, and England, to the total number of twenty-one, but, up to the present time, not of this character in Italy. Six entire cups, and portions of fifteen other separate ones have been discovered, namely:—in Belgium, 1 (the Couvin cup); in Germany, 3; in France, 6; and in England, 11; their colours varying generally from pale green, like the fragment in the British Museum, to dark amber. Among the entire number nine represent chariot races only, three exhibit chariot races and gladiatorial combats, while the remaining nine are simply gladiatorial. Taking one example, that found in 1892 at Couvin, it is $2\frac{1}{2}$ inches high and unique in its inscriptions and in other respects. The reliefs show in succession round the glass, which may be taken itself to represent the *spina*, four quadrigas driven to the sinister, in accordance with the

[1] A beautifully modelled example, $8\frac{7}{8}$ inches high, of precisely the same form of vase "à la mode du Janus bifrons traditionnel," found at Boulogne, is preserved among the important collection of Roman antiquities in the museum of that town.—See *Revue Archéologique*, 1889, "Quelques Verreries Romaines de Boulogne-sur-Mer." Paper with illustrations by M. V.-J. Vaillant. A rude vase, 10 inches high, in white ware, embossed in the same manner with a single human face, and having DO MIIRCVRIO painted on the lower edge, was found at Lincoln, and is probably of local make. It is engraved in *Proceedings Soc. Antiquar.*, 2nd S., vol. iii. p. 440, and is now in the British Museum.

[2] Engraved in E. Garnier, *Histoire de la Verrerie et de l'Émaillerie*, p. 41, edit. 1886. An exact copy of this vase, made at Murano, was exhibited in the Italian section of the Paris Exhibition of 1878.

traditions of the arena; over the reliefs are the names of the charioteers: Pyramus, Eutichus, Hierax, and the conqueror Olympus holding a wreath and the palm of victory (Plate 2). In the fine chariot race cup from Colchester, which much resembles that found at Couvin, there are, as usual, four competitors whose names are given as Antilocus, Crescens, and again Hierax and Olympus. Three of them are saluted in the inscriptions with "Vale!" having been beaten by the workmanlike driving of "Crescens Ave!"[1] The three cups with chariot races and combats of gladiators have the subjects arranged in two bands round the vessels; and those exhibiting gladiators only similarly divide the scenes into four groups, and in all but two moderate fragments give the names both of the victors and the vanquished.

These vessels and their signification have been greatly inquired into on the Continent. The whole of the evidence concerning them, their inscriptions, their details, and their use, has been brought together, discussed, and weighed by a distinguished Belgian antiquary in an able manner, consonant with the high judicial position which he occupies. In considering the probable country of their manufacture, M. Schuermans points out that eleven of the twenty-one examples of these glasses, at present known, have been found in England; this he courteously allows may be owing to our more careful observation. Statistics of *provenance* are perhaps inconclusive, but while leaning for other reasons to Normandy or to England, M. Schuermans believes, if the preference is given to the latter, the date of the objects must be rather in the second than in the first century.[2]

Conspicuous among the attractive and delicate productions of the Roman glass-makers are the pictorial representations made by the means of gold-leaf either embedded in the substance of the glass or fixed to the surface. These objects are sometimes mythological and sometimes Christian; they have decorated the bottoms of shallow vessels, like the "prints" in mazer bowls. The disks have been broken out, and have come down to us in large numbers in consequence of the early Christians having been in the habit of affixing them to the exterior of the *loculi* in the catacombs. By some antiquaries they have been attributed to the fourth and following centuries; on the other hand, an Italian authority of note, who has well illustrated these relics, carries them into the period between 200 A.D. and 400 A.D., with a margin of date in each direction.[3] For their manufacture there were various methods employed, the most usual procedure being carried out by fixing leaf gold on the upper surface of what was to form the bottom of a vessel, tracing lines through it with a point, and clearing away what was not wanted, leaving the figure or subjects, and floating a coat of clear glass over the picture. The bowl was then added, and the whole finished by fusion.[4]

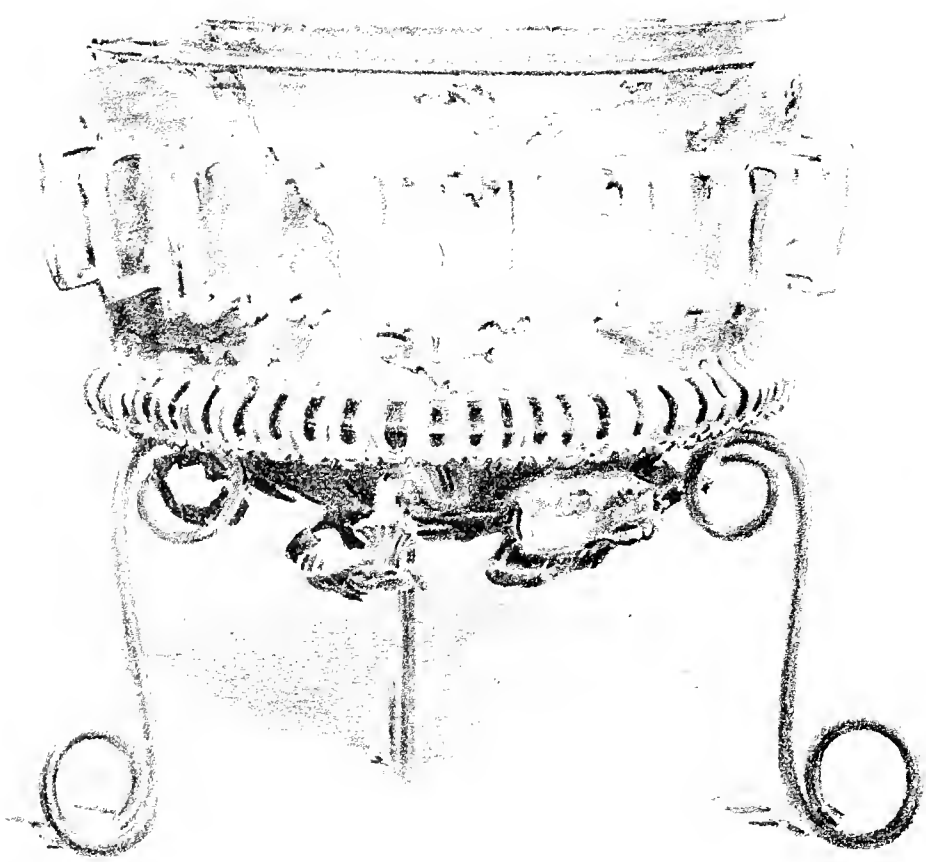
[1] M. Garnier gives an engraving, p. 32, of a cylindrical moulded cup found in Numidia (province of Constantine) and bearing the inscription between laurel wreaths: AABE THN NEIKHN. The chariot race glasses were common wares bought by admirers of the athletes. In the sixteenth and seventeenth centuries glasses were contended for at Venice as prizes in gondola races. Such a challenge glass, 10½ inches high, about 1600, with a cover having the following inscription etched upon it with a diamond point—REMIS STERILIS DVDVM PAVLVS ARTAQ—is in the appreciative hands of Mr. J. Seymour Lucas, A.R.A.

[2] H. Schuermans (Hon. F.S.A.), Premier President de la Cour d'Appel à Liège, *Verres à Courses de Chars; Annales de la Société Archéologique de Namur*, tome xx., 1893.

[3] Padre Garrucci, *Vitri Ornati de Figure in Oro*. Roma, 1858.

[4] It may be convenient to mention here the important glass cup known as the Vase of Podgorica, engraved with scenes from the Old Testament by the hand of a Romano-Christian. This is now in the Musée Basilewski in Paris; it has been described and illustrated by the Cav. di Rossi in the *Bulletino di Archeologia Cristiana*, 1877, p. 77. See A. Evans, "Antiquarian Researches in Illyricum," *Archaeologia*, vol. xlviii. p. 84.

2.—ROMAN GLASS.



3.—ROMAN GLASS.

Among the most striking efforts of manual dexterity, and tenderness of work in glass, a very high place must be accorded to the cups covered with a free and open network of small rings, united to the vessel only by a series of upright props or points, and standing about a quarter of an inch from it; these are the *Vasa Diatreta*, one class of the skilful work of the *diatretarii*. Their extreme delicacy and rarity make it convenient to record that such a cup was found at Strasbourg in 1825, bearing just below the rim the name of the Emperor Maximianus (286-310 A.D.),—the cup being white, the network red, and the inscription green; this, with the missing parts supplied, appears to have been: [BIBE MA]XIM[IA]NE AVGV[STE]. It perished in the bombardment of 1870.[1] A second, also netted and inscribed, is in the Antiquarium in the Neue Pinacothek at Munich, from a tomb at Cologne. A third is in the Trivulsi Collection at Milan, the cup being white, the net blue, and the inscription—BIBE VIVAS MVLTOS ANNOS—green. A fourth is in the K. K. Oesterreich. Museum at Vienna, both cup and net being white and the form resembling that of the Strasbourg vessel; it is incomplete and about $4\frac{1}{2}$ inches high. A fifth example is in the Muzeum at Buda-Pest. This is also of white glass, of the bowl shape, $5\frac{1}{2}$ inches in diameter and 4 inches high; it is imperfect and has no net, but round the cup is a series of Greek letters—ΠΙΕ . . ., and below these a hollow moulding closely perforated (Plate 3). A sixth is in the Tesoro of St. Mark at Venice; it is of greenish glass, of situla shape, and about $10\frac{1}{2}$ inches high by 8 inches wide at the top and 4 inches at the bottom. On the upper part is shown a lion hunt in relief, two men being on horseback, accompanied by dogs; below is network.

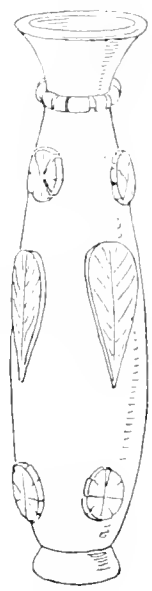


FIG. 8.
(One half.)

Further examples of cut glass should be alluded to as showing the complete way in which the Romans had realised the capabilities of their material. A graceful example of *crystallinum* or colourless glass, so much prized by the ancients, cut in hexagonal indentations, is in the Slade Collection.[2] A different and more difficult mode of treatment is shown by a vase of the same choice glass in the Baierisches National Museum at Munich; in this rare specimen, which is 6 inches high, the whole of the outer surface has been treated by the wheel, the rosettes and leaves standing out in relief (Fig. 8).

Before touching upon the commoner objects in glass of Roman domestic use, or funeral furniture, a few words may be said upon the better sorts of Roman blown glass. Various exceedingly beautiful examples, some with admirably manipulated handles, have been preserved, showing perhaps greater refinement of form than any other ancient glass vessels. Many of them are in imitation of crystal, and those of amber, dark purple, deep blue, the rare violet tint, and shades of green, are eminently attractive; and particularly if they exhibit, as old glass usually does, in a more or less marked degree—according to the nature of the materials composing it, the accidents of atmosphere, or long contact with the earth—the beauteous though

[1] It is badly engraved in Garnier, p. 39, and better in A. Sauzay's *Marvels of Glass-Making*, p. 16, and in Schweighäuser's *Notice sur quelques Monuments du Département du Bas Rhin; Mémoires de la Société Royale des Antiquaires de France*, Nouvelle Série, tome vi. p. 95, 1842.

[2] Found at Barnwell, near Cambridge; portions of two other similar cups are in the British Museum; one of them is illustrated by Apsley Pellatt, Pl. III., p. 136.

An ancient Roman would certainly have been dismayed at the sight of an English cut wine-glass of the best kind at the end of the nineteenth century—the finest possible glass, the first technical skill, but little artistic merit.

effacing evidences of decay, justly rendering such vessels so precious in the estimation of connoisseurs.[1]

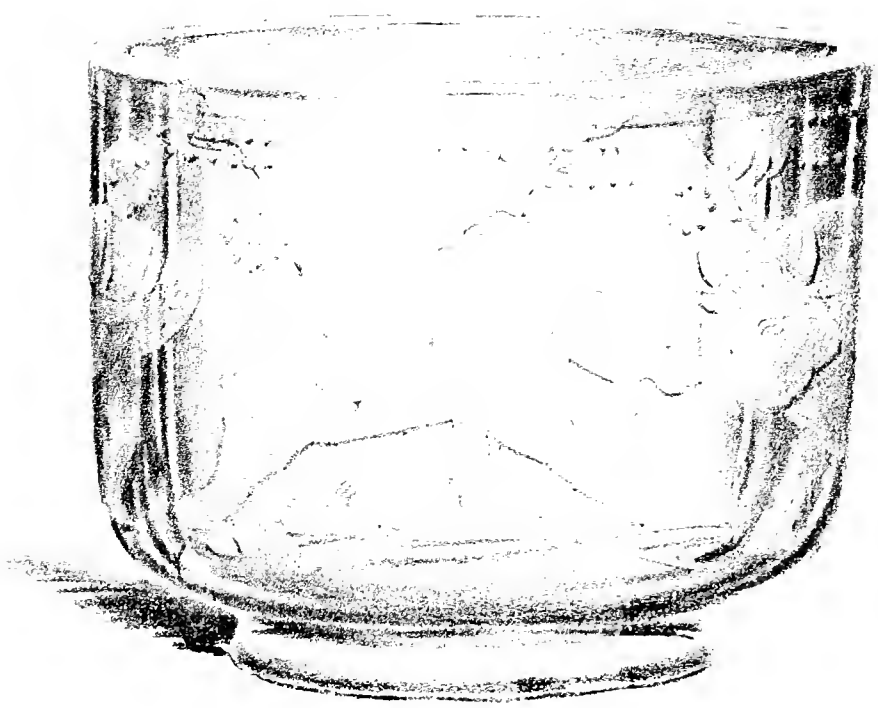
The pictorial ability of the Roman glass-workers is very conspicuous in their cups decorated with combats of animals and other subjects in enamel. From the amount of metallic oxides contained in this medium, causing it to perish so readily in damp places, comparatively few examples have been met with. Particularly important are those that have been found in graves at Varpelev, Thorslunde, and Nordrup (Figs. 9, 10) in Seeland, Denmark. They date from the early part of the fourth century (Plate 4).[2]

The practice of decorating with thin lines or strings of glass may have been suggested by the chevron or wavy lines and belts in the productions of Egypt and Phoenicia, but it is more probable that these means of ornament would, from the natural tendency of molten glass to take such form, at once have been obvious to every glass-maker; and similarly of the denticulations and some other details which were pushed to the farthest confines of dexterity ages after in Venice. Such decorations seem to have had their dawnings in the initial efforts of the Romans connected with the deft and rapid attachment of recurved, crumpled scroll handles, often working from the neck stringings of their glass jugs. Out of the simple stringings as shown on the necks of some vessels, and the tentative or fuller treatment in the same style of the bodies of others, was developed the peculiar plain or ribbed trailings, in opaque sketchy lines, on certain curious glass vases, jugs, and drinking-cups. Those that have been found as far north as at Nordrup in Seeland, Denmark, are of the early part of the fourth century (Figs. 11, 12, 13). It is probable that these particular footed cups are the direct Roman ancestors of some of the footless Anglo-Saxon "tumblers" which will be spoken of later on. Circumstances and conditions tend to point to the Rhine-land generally, possibly to Cologne in particular, where several examples have been found, as one of the sources of the latter vessels; and there may be some reason for thinking that Gaul—where were, perhaps, the aptest pupils of the Roman glass-workers—supplied a certain amount of such glass to Britain in Roman times. Examples of trailed jugs are preserved in the Germanisches Museum at Nuremberg

FIG. 9. (Full size.)

[1] The Decay of Glass has been fully and ably treated of by the late Dr. J. Fowler in the *Archaeologia*, vol. xlvi. p. 65; it has also been somewhat touched upon by M. M. Appert et Henrivaux: "Sur les dévitrifications des verres ordinaires du commerce." From the pen of the latter an admirable illustrated article, "Verre-Verrerie," has been contributed to the *Dictionnaire Encyclopédique de l'Industrie et des Arts Industriels*.

[2] The two cups from Varpelev are engraved in the *Annaler for Nordisk Oldkyndighed*, 1861, p. 305. The one, $3\frac{3}{4}$ inches high, has a lion and a bull painted on it; and the other, $2\frac{1}{2}$ inches high, birds with grapes, etc. The cups from Nordrup are illustrated in *Nordiske Fortidsminder udgione af det Kgl. Nordiske Oldskriftselskab*, 1. Hefte, 1890; they exceed all the other Danish examples in the admirable drawing of the animals depicted upon them. In the Louvre is a small cup of green transparent glass, about 3 inches in diameter, said to have been found at Nismes; on it figures of animals and foliage in yellow and red are discernible.—Introd., *Slade Cat.*, p. xv. Plain cups of the same form and size, and apparently about the same period, have been found in cists in Forfarshire.—*Pro. Soc. Ant. Scot.*, vol. viii., N.S., p. 136.



4.—ROMAN GLASS.

(Fig. 14), and in the Kunstgewerbe Museum at Cologne (Fig. 15). Later evolutions of stringings and trailings will be alluded to in their proper places.

The identification of sites of glass-works, or even of centres of glass-working districts in the northern parts of the Roman Empire, has always been a difficult question. Numbers of choice vessels have been found whose fragility would seem to forbid the supposition that they had

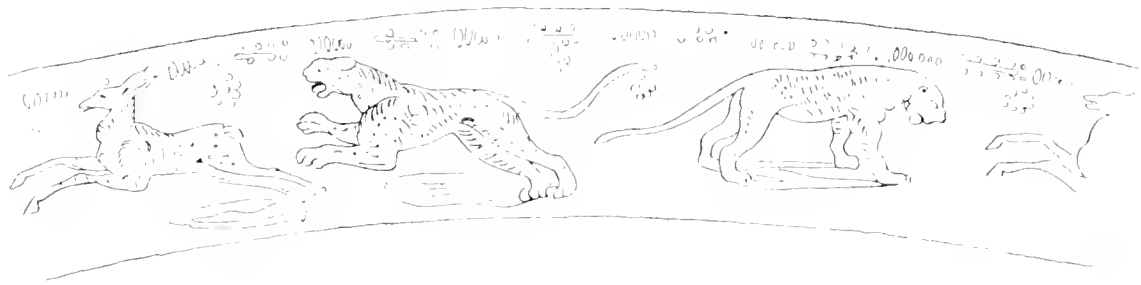


Fig. 10. (One half.)

been transported from any great distance, did we not know to what extent at least the better sorts of Roman glass objects were exported from Rome to remote parts of the Empire. But with the vast quantity of glass of the commoner kind such exportation would have been impossible. The glass vessels found in tombs and graves throughout the Roman dominions bear a most remarkable resemblance to each other; traditional uses would have caused traditional forms, and it appears that the fact must be accepted that they were copied from Roman examples by provincial glass-makers. It may be remembered that glass is not a difficult thing to

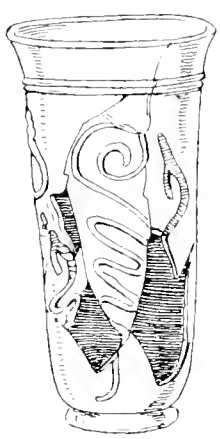


Fig. 11. (One half.)

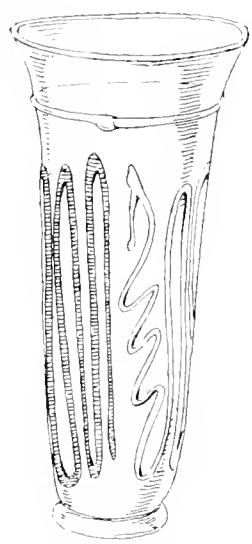


Fig. 12. (One half.)

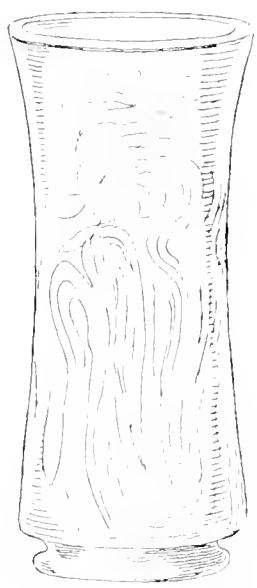


Fig. 13. (One half.)

make, and that a small furnace is not an expensive affair to set up, nor are the component parts of the most ordinary sort of glass, namely, green, difficult to meet with. There is consequently no reason *a priori* why the Romans should not have erected glass-works, just as they set up pottery kilns, and established fulling and dyeing and all sorts of other industries wherever they planted their foot and circumstances were favourable. And it seems contrary to the genius of so great a people that lumps only (massae) of unworked metal should have been continually obtained from central glass-works, to be used plain or to be coloured by smaller manufacturers, and that they should not have proceeded in the different provinces upon

their own lines, and prepared and fused the local material in all its stages, with the assistance of natives pressed into service. In fact, the large quantity of vessels of green glass that has been found throughout Britain—to take only one province—would quite tend to indicate a number more or less considerable of small glass furnaces working with the simplest materials and absolutely independent of each other, in accordance with the practice of the Old World; the makers always bearing in their mind's eye the traditional Roman requirements and forms. The smallness of the furnaces would in a measure account for the apparently entire absence of any vestiges of them discoverable in our own day. Moreover, as regards Britain, it is difficult to believe that the long sandy shores facing Gaul, the brilliant siliceous deposits of Vectis, still used in modern days, and such places as Salenae in the Mid Lands, were passed by unheeded by the Romans, and their products not utilised on the spot, and that supplies of so absolutely necessary a commodity to them as vessels of glass of all kinds, or prepared masses of metal for its manufacture, were entirely drawn by the Romans in Britain and the Romanised Britons from the Continent. This subject will be touched upon from another point of view in speaking more particularly of Roman glass-making in Britain.

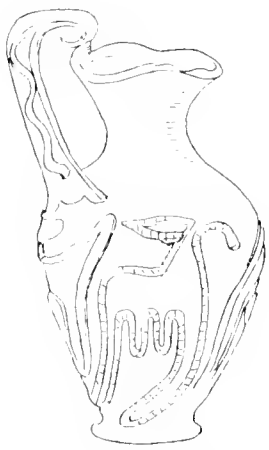


FIG. 14. (One half.)

Up to this place the higher qualities of Roman and earlier glass have been alluded to. The glass vessels of an inferior kind, which in a way take the place of, and serve the same purposes as does our own common earthenware at the present day, have also been revealed to us in their perfection, and in countless examples, chiefly of course through the medium of the graves. What may be called the glass furniture of the tombs of the Romans, or of the Romanised barbarians, so-called, such as the Briton and the Gaul, tells us everywhere the same story. The general similarity of the glass vessels which the spade, intelligently guided, has revealed in the researches throughout so vast an empire is, as has been intimated, very striking. Thus for a moment, setting the pottery aside and taking glass vessels only, we may refer to certain items of the common contents of a tomb: the capacious square or round glass cinerary vase, with its inevitable broad reeded handle or handles, which no one so well as a Roman glass-maker knew how to put on; the elegant vessels for libations; the minute unguentaria, long the lachrymatories of romantic dilettanti; and occasionally the cherished personal cup,—fragile relics which happy accidents, the ploughshare, or sagacious and systematic excavations have disclosed on numberless sites of Roman graves in Britain. Or we may take the villas, the stations on Hadrian's great Barrier, or our buried cities, and find that the dwelling-places of those living so long ago render up the same rigid account, but in a much more fragmentary state, as the last lodgings of our ancient masters. We may compare the whole of these remains with the same frail antiquities which like researches have revealed in Gaul, to the enrichment of such notable collections as the museums of Avignon, Lyons, or Boulogne. Again, travelling further, and skirting the shores of the Mediterranean, we

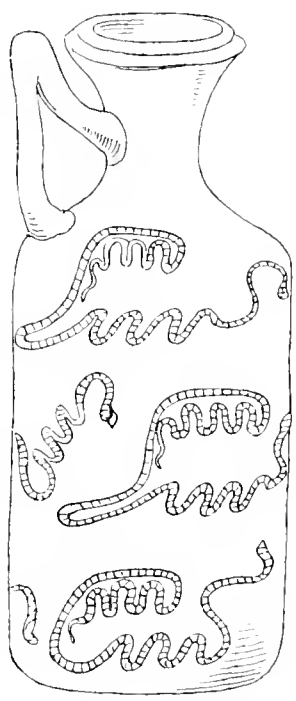


FIG. 15. (One half.)

may touch and excavate almost at any point between Syria and the Pillars of Hercules, examine the spoils from Herculaneum and Pompeii, the extraordinary collection of glass vessels in the Museo Nazionale at Naples, dating from before the irruption of 79 A.D., or study the teeming soil of Rome itself—to find everywhere the same wonderfully precise correspondence, the same unity of direction, the same steadfast art record in the same most fragile of materials, the forms and objects necessarily qualified only by the exigences of domestic or funeral use, and to a slight extent by local conditions. And as it was with the household and funeral glass, so it was, naturally in a more marked degree, with respect to the best kinds of coloured or mosaic glass, made, doubtless, as has been said, in Rome itself, and exported only for the opulent settler in his villa in the conquered province far away. The Roman, like the Chinaman, changed not—

Coelum non animum mutant qui trans mare currunt.[1]

As he was in Rome, such he was in Iberia, in Gaul, in Britain; as with his arms, so with his arts and his letters; every printed page to-day is a testimony of his persistence. His ideas, his methods, his buildings, were alike fixed and traditional; forced at first upon conquered races, they were soon willingly adopted by them; they were woven into the foundations of their subsequent efforts, and their effects remain, not quite in all respects to the present day, because the artisan has taken the place of the artist; we have receded from classical standards, we are now in a curious state of chaos, and a "Restitution of Decayed Intelligence" herein is sadly needed.[2] Nevertheless, there may always be fresh correctives; the spade will constantly be put into the ground, and even from places now waste and wild we shall continue to call up the Roman from the dim past, and, to paraphrase the language of one of the greatest of Roman citizens, see him not as through a glass darkly, —"in a riddle"—but, as it were, face to face, and carry on the record concerning a multitude of points besides that of glass-making, upon which our knowledge is still but partial or incomplete.

Allusion has just been made to the better sorts of Roman glass. That from the graves was not always of the ordinary domestic kind. Occasionally a cup of a finer quality was added, not so much connected with the strict pagan rites of sepulture, as representing an object which from its high character attested at once the self-denial of the survivors in so relegating it to the oblivion of the tomb, and its dead owner's attachment to it, as a valued personal treasure to be of use to him in the Elysian fields—in the feasts of the gods in a future state, or in other mysterious fancies of heathenism. Such a vessel was the Portland Vase, consigned to the sepulchre, as it is believed, of an enlightened ruler, Alexander Severus (235 A.D.), but of earlier date; the Naples Amphora; the remarkable jug, but in a much lower artistic rank, from a tomb at Barnwell, near Cambridge,[3] a

[1] "The air, but not the mind, they change,
Who in outlandish countries range."
James Howell to Dr. Mansel, Venice, July 1, 1621.

"They change their skies above them,
But not their hearts that roam!"
Rudyard Kipling,
"The Native Born," *The Times*, Oct. 14, 1895.

[2] It is indisputable that the demand for refined artistic work at the present day is extremely limited. "Art manufacturers," after all, have to produce what will sell, and the things that sell best are those that are very cheap and curiously ugly, though one does hear of cut wine-glasses at £4 each for the American market.

[3] Engraved, *Slade Cat.*, p. 44.

notable example as much from its form as from its delicate manipulation; the equally remarkable one from Sittingbourne (Plate 5), and perhaps the important sprinkled amber-coloured jug from the Rhine district.[1]

V.—BYZANTINE.

It is well known that the unwieldy character of the Roman dominion led to its permanent division into eastern and western parts at the end of the fourth century, with Constantinople, founded 330 A.D. by Constantine, on the ancient Greek city of Byzantium, as the capital of the Eastern, and Rome of the Western Empire. Province after province was invaded by the barbarians, popularly classified as the Goths and Vandals, and the Western Empire was extinguished at the end of the third quarter of the fifth century. The Eastern Empire, whose capital was better placed, with greater means and arms, withstood the invasions, and prolonged its existence for many centuries.

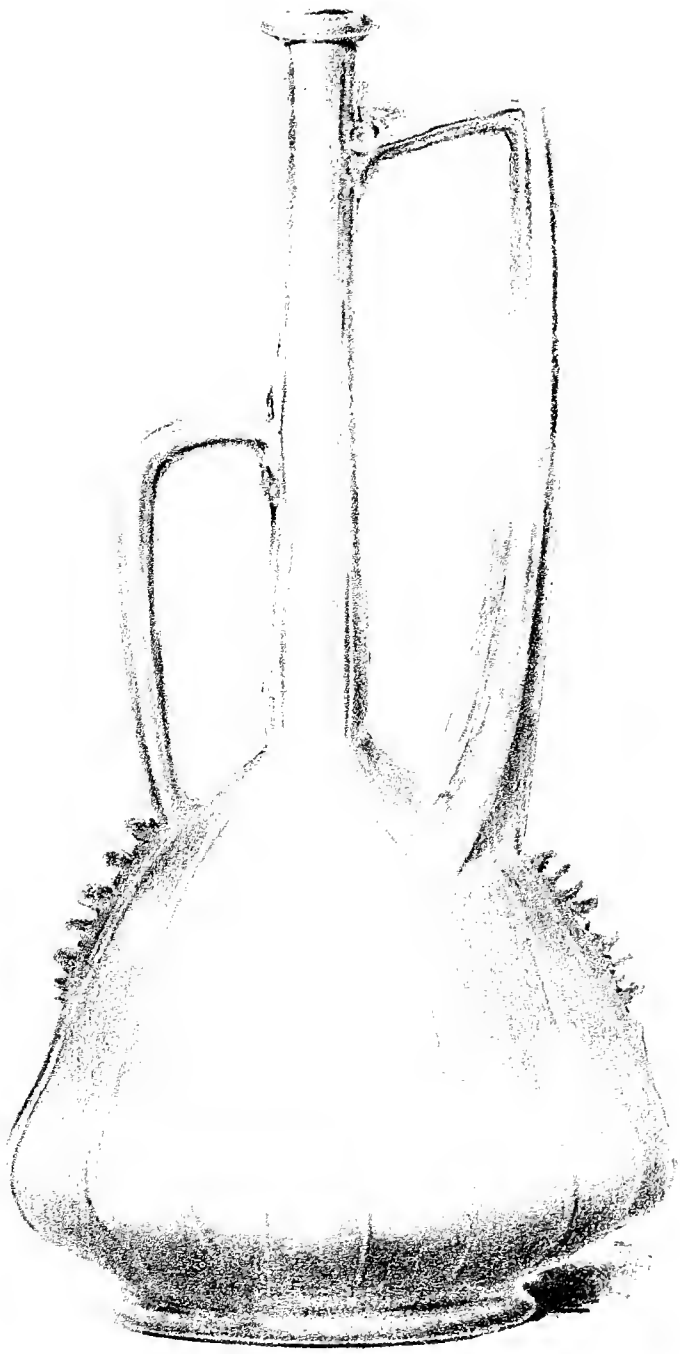
The gradual falling off of such arts as that of glass-making similarly synchronises with the decay and break-up of the Roman Empire. Furnaces could not be carried on intermittently with life unsafe and whole countries in confusion; this gentle industry would be the first to fail. But we have no certain information of the course of the failing in the Western Empire, beyond what may be gathered from the scanty number of such glass vessels which may be attributed to this wide period of unsettled or troubled times. It may be taken for granted that the same processes continued to be used, though with diminishing success, and, naturally, with less demand for the results; and whereas, as regards glass of earlier times, approximate dates are not difficult to arrive at, owing to facility of comparing a large number of examples, we are now confronted by the great drawback of only meeting with few and scattered objects, rude or imperfect in manufacture and difficult to date, and generally more so still to localise. A two-handled vase,[2] resembling those that may be seen on Christian sarcophagi, intended to represent chalices, is probably of the fifth or sixth century; it has much interest from the early example it gives of the ribbed and upper folded foot; and perhaps some of the ill-made heavily trailed cups belong to this period (Figs. 16, 17). The collateral progress of window-glass, from its scanty use in the first century, in the form of small rough cast plates almost impervious to light, to its employment from the seventh—perhaps earlier—to the ninth century, as a coloured medium for the transmission of light, need merely be alluded to here; but the latter time furnishes an approximate date for a fresh point of departure in a vitreous art that had a brilliant future before it.

FIG. 16. (One half.)

FIG. 17. (One half.)

[1] Engraved, *Slade Cat.*, p. 16.

[2] *Ibid.*, p. 55.



5.—ROMAN GLASS.

During the period still under consideration Roman glass industry was carried in the direction of mosaic, examples of which process may be seen in Rome itself, dating from the time of Constantine until the middle of the ninth century. That this art was not confined to Rome is shown by the doubtless local mosaics at Ravenna of the fifth and sixth centuries. In the eleventh century mosaic work seems to have been discontinued in Rome and elsewhere in Italy, except in Venice, inasmuch as mosaic workers were at that time sent for from Constantinople to Rome.

With reference to the glass vessels produced in the capital of the Eastern Empire, and in the provinces under the influences of Byzantium, the information is still more limited than that for the West. The art of glass-making fell under a similar eclipse, but which, for Imperial reasons, as regards historical continuity, was more marked than in the Western Empire. That the Byzantine glass artists followed classical models, but with indifferent success, before art became paralysed under the Iconoclasts, is apparent from the only seemingly undoubted examples of Byzantine vessels of glass which have been preserved, but with some hesitation ascribed to this origin. They are chiefly of the bowl form; such is that in the Slade Collection, with the story of Artemis and Actaeon, deeply cut with the wheel and having Greek inscriptions; another, lathe-cut, in oval depressions, is in the same collection. To this source should also belong the surprising glass cups with Greek inscriptions which have been found in Selande and Jutland,[1] as well as those lathe-cut, with oval depressions, all of which must have crept from Byzantium to the north, through Hungary and Bohemia, pointing to the relations which Denmark had with the East, through her amber trade, from the first quarter of the fifth century. No glass vessels have been found in interments in the Scandinavian peninsula. The excavations made in 1894 on the site of the Anglo-Saxon cemetery on High Down Hill, near Worthing, under the direction of Mr. C. H. Read, have revealed glass vessels of high interest, one vase having a hare hunt, and round the rim the inscription °+ΥΠΕΝΩΝ ΧΡΩ, engraved on it by the wheel.[2]

From the time of Leo the Isaurian, 740 A.D., the first of the Iconoclast emperors, and who set his mark on the famous walls of Constantinople, to the middle of the following century, the arts perished out of sight, and with them the ancient traditions. On their revival they took the new direction to which they had been tending before their obscuration in evil days; but of what character post-iconoclastic glass vessels were, there seems to be no more evidence to appeal to than is exhibited by the five thin greenish and rudely-cut glass cups, and the two basins now preserved in St. Mark's, Venice, and believed to have formed part of the plunder of Constantinople when that city drew off the attention of the Crusaders from the Infidels during the fourth so-called Holy War, and was taken from the degenerate Greeks with the assistance of the Venetian fleet, led by the aged and blinded Doge Arrigo Dandolo, in 1204. Among these vessels is a small vase in dark brown glass, decorated with pale flesh-coloured enamel, with inscriptions in Cufic characters, as yet undeciphered, perhaps merely ornamental, after a not unusual Oriental principle, and further decorated in gold and red.[3] Such and so few are the Byzantine vessels of glass which can, even hesitatingly, be ascribed to the long period between 800 and 1200.

[1] See C. Englehardt, "L'Ancien Âge de Fer en Sélande," *Mémoires des Antiquaires du Nord*, vol. for 1878-83; Du Chaillu, *The Viking Age*, vol. i. p. 277.

[2] Engraved, *Archaeologia*, vol. xliii. p. 206.

[3] Introd., *Slade Cat.*, p. xxv.

The Sacro Catino at Genoa, the Holy Grael, a green glass dish, long believed to be formed from an emerald; and the blue glass cup at Monza, from time immemorial reverently looked upon as a single sapphire, are perhaps both of Byzantine origin.[1]

VI.—ORIENTAL.

Among the Oriental glass products, those best known to us are the enamelled lamps which were suspended in the mosques. They have great interest on account of their usually bearing dates, from the middle of the fourteenth century downwards, and are lineal and conspicuously picturesque representatives of an art which was widely practised under Arab rule from the tenth century, and whose decorations were probably derived from Byzantine models.

It may here be mentioned that lamps, or, speaking more strictly, lamp-shades, of the opaque "Persian" ware, and of the same form as the Arabian lamps, are important and rare items among the numerous forms in the four great divisions of this most decorative of all true glass-glazed wares. The three first classes are of purely Persian origin, and are little known. As to the fourth, also tabulated as "Damas," "Rhodian," and "Lindus," it had its rise, like the others, in the glazed bricks of Egypt or Babylonia in remote times. Carried to Persia, no doubt by simple travelling potters, after the traditional Eastern fashion, it there took some of its decoration, and passed from thence to Damascus. The great development of this class appears to have been during the reign of Solyman the Magnificent, the famous Ottoman Sultan, 1520-1566, its best period corresponding with that of Italian Majolica, while its manufacture in the island of Rhodes, under the knights, is nearly as well established a fact as the influence of the art of Faristan upon the majolica-makers of Italy—an influence which lingered long, as we shall incidentally see, with the glass-makers of Venice.[2]

To Damascus, so closely associated with the disasters of the second Crusade, was early assigned the origin of many enamelled glasses which came over from the Orient to the west, a credit more deserved after the fourteenth century than before it. Thus, in 1380, Charles V. of France had "trois pots de voirre rouge à la façon de Damas"; in 1399 he possessed "une coupe de virre peint à la Moresque." Henry III. of England had a glass cup given to him

[1] The Santo Calix of Valentia consists of a hair-brown sardonyx cup, 4 inches in diameter, of Roman Imperial times, with two ogee gold handles, stem, and knop, connecting it with a sardonyx base of the eighth or ninth century. The gold mountings were renewed in the fifteenth and sixteenth centuries.—See *Archæological Journal*, vol. xxxiv. p. 316; description by Mr. J. C. Robinson. The Santo Calix is believed to have been used at the Last Supper; this is improbable, but difficult either to prove or to disprove; its age is not against the attribution though its quality is. Similarly the Sacro Catino at Genoa has been variously asserted to be the dish which held the Paschal Lamb at the Last Supper, or the vessel in which Joseph of Arimathea received the Blood from the Pierced Side; it is a hexagonal dish long thought to be a single emerald; but when it was brought to Paris by Napoleon in 1806, the mineralogist, Guyton de Morveau, recognised it as glass of beautiful colour and transparency, but containing a few air-bubbles; it has been slightly ornamented with a tool as in gem engraving. Theodolinda's lovely blue cup at Monza is about 3 inches in diameter. This is considered to be formed out of a sapphire; it is improbable, and Mr. Nesbitt suggests that it is glass, though he found it very cold to the touch and could detect no bubbles in it.—See *Archæological Journal*, vol. xiv. p. 8. Paper on the Precious Objects in the Church at Monza, by W. Burges.

[2] See *Archæologia*, vol. xlii. p. 387, "On a Lamp of Persian Ware," etc., paper by Mr. C. D. E. Fortnum.

in 1244 by Guy de Rousillon. This was probably Oriental. The king valued it so much that he sent it to Edward of Westminster, the goldsmith, with orders to remove the glass foot and to replace it with one of silver-gilt, apparently to add a cover to it, to hoop it with silver, and to present it on his behalf to the queen.[1] Of about this date must be one of the so-called Hedwig's glasses, preserved in the Museum of Silesian Antiquities at Breslau, Oriental, "de Damas," of light greenish glass and decorated at the top and the bottom with

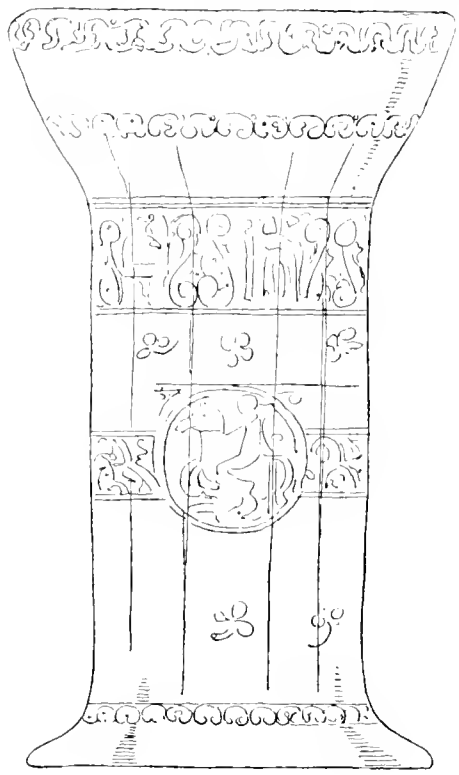


FIG. 18. (One third.)

FIG. 19. (One third.)

rude sketchy flourishes (*schnörkele*) in the usual thin red enamel lines.[2] Of much the same form, 12 inches high, but fuller in shape and later, is a beautiful Damascus glass at Munich (Fig. 18). Later still, apparently early in the fifteenth century, is the Saracenic-looking glass known as the "Luck of Eden Hall"[3]—not necessarily an ecclesiastical vessel, because the leather case, of nearly a century later date, in which it is enclosed bears the sacred monogram which was frequently placed on secular objects. Another Saracenic glass, also in a fifteenth-century case, is preserved in the Museum at Douai. At Chartres is treasured the glass said to have been given by Haroun al Raschid to Charlemagne, but it is considered to be not earlier than the middle of the thirteenth century; it is possible that it is fully a century later.

Allied to the Oriental drinking-cups of this period are the capacious enamelled glass vessels, apparently of the latter part of the thirteenth century, containing earth from the Holy Land. Two of these, still so filled, are in the Treasury of St. Stephen's at Vienna; a third is at Nuremberg (Fig. 19); these, again, have been thought, surely erroneously, to exhibit Venetian influence.

[1] The extract from the *Close Rolls* concerning this order is printed in the body of the present work, where the glass in question is again alluded to.

[2] E. v. Czihak, "Die Hedwigsgläser," *Zeitschrift für christliche Kunst*, III. Jahrgang, Heft 11, s. 334; and *Schlesische Glaser*, p. 184, edit. 1891.

[3] Engraved in Lysons's *Cumberland*, p. ccix.

VII.—MEROVINGIAN.

To return to the main story. Based immediately upon late Roman models, but at once taking new directions as to their forms, are those very remarkable and rare drinking-glasses with stringings, lobes with long free pendent tails, and small bases or feet, which have been found in different parts of England associated with Anglo-Saxon interments, as at Sarre, Kent (Plate 6), and which bear so close a resemblance to the precious glass vessels of the same period which Merovingian or Frankish graves have surrendered over a wide area to explorers on the Continent, as to point to a common centre of manufacture. Similar cups have also been found as far off as at Narona in Dalmatia.[1] Their manipulation is extremely delicate, implying an origin in a district long and continuously familiar with the higher characteristics of glass-working. Possibly Cologne or Trèves may have been the source of the fabrication of these fragile antiquities, which may be taken to date within the sixth and seventh centuries.[2]

Following somewhat the form of late Roman cups, such as are shown in the Nordrup examples of the early part of the fourth century, and differing generally in shape from the rare relics emanating from the Anglo-Saxon and Merovingian graves just alluded to, but belonging to the same peoples, and found under like conditions throughout the same spacious regions, are the glass cups of varying heights and modifications of shape, comprising tall and short, conical and trumpet-shaped cups, ribbed or fluted, stringed and cross-stringed (Fig. 20); globular cups for service in the palm of the hand (Figs. 21, 22, 23); semi-spherical bowls, plain or occasionally ribbed (Figs. 24, 25, 26); and small plain vessels with widened and rounded bases, sometimes ribbed (Figs. 27, 28, 29), a button on the bottom (Fig. 30), and with constricted or waisted bodies. These last cups are of a distinct Teutonic type. The rarest form of all is perhaps the funnel shape. The range of the whole of these frail antiquities appears to extend from the end of the sixth to the early part of the tenth century. A few of the tall trumpet glasses, whose form was doubtless derived from drinking-horns, have slight feet or bases, recalling, so far, their late Roman prototypes, but these supports tend to the simple knob left on the bottom by the maker before he released his work from the pontil; they have no significance as feet to stand on. In some rare instances the actual curved bugle-horn shape is retained. There is a beautiful example in the British Museum, stringed, looped, and fluted, from Bingerbrück, near Rüdesheim. With the exception of Mr. J. Curle's stringed and fluted beaker from Gotland (Fig. 31), the glasses here illustrated were found in Germany.

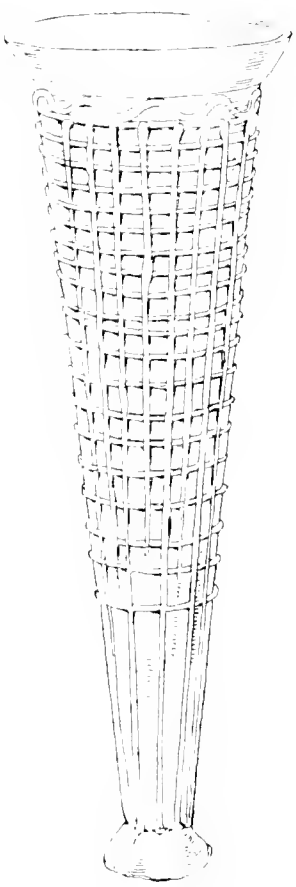


FIG. 20. (One half.)

[1] A. Evans, "Antiquarian Researches in Illyricum," *Archæologia*, vol. xlviii. p. 75.

[2] Examples are preserved in the Museums at Wiesbaden, Mayence, Cologne (Wallraf Richartz), Brussels, and Munich. There are several in the British Museum.

The entire absence, in all other examples and varieties of this devious class of drinking-vessels, of any base upon which the object could be supported, has been held to indicate a

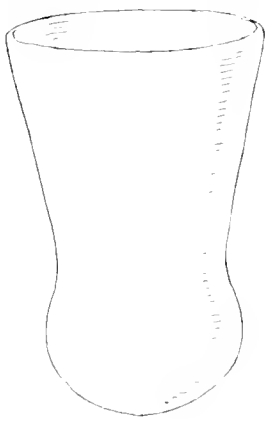


FIG. 21. (One half.)

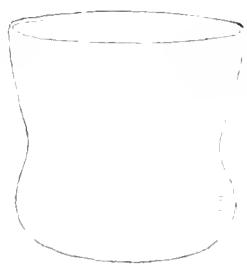


FIG. 22. (One half.)

FIG. 23. (One half.)

compliance on the part of the makers with the users' indisposition to set down their drinking-cups unemptied. Perhaps ease of fabrication with glass-workers, who, wherever their

FIG. 24. (One half.)

FIG. 25. (One half.)

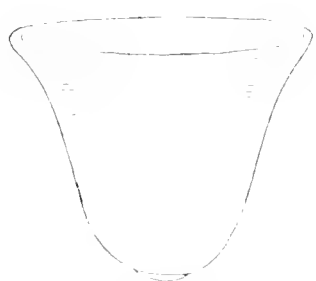


FIG. 26. (One half.)

furnaces may have been, must have gradually lost much of the manual dexterity and many of the ancient traditions of manufacture, may also somewhat account for the simplicity of

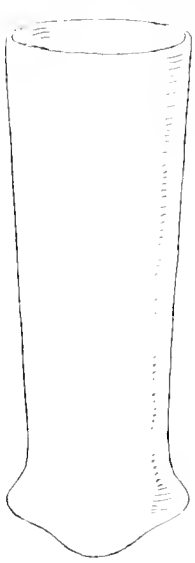


FIG. 27. (One half.)

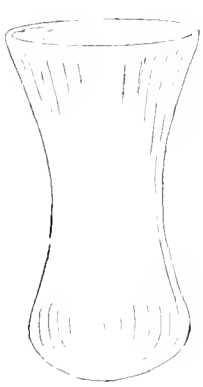


FIG. 28. (One half.)

FIG. 29. (One half.)

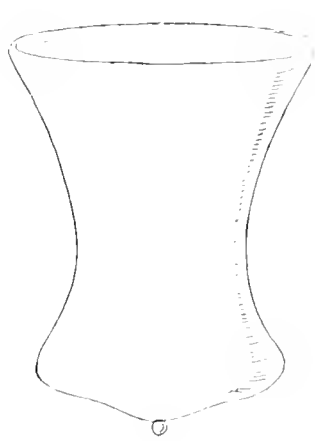


FIG. 30. (One half.)

so many of these attributes of common life. A characteristic not less remarkable in the greater number both of the plain and of the ornamental glasses of this class is their limited

capacity, implying that the historic and proverbial insobriety of their users was brought about, not by deep draughts from great cups, but by the more perilous process of reiterated appeals to small ones, with "point de rubis sur l'ongle." It may be suggested that the fluted and trumpet-shaped, the ribbed, the horizontally-stringed and cross-stringed, and the unpractical pure funnel-shaped glasses belong generally to the middle period; while the bowls and the Teutonic constricted cups are of the latter part of the eighth to the end of the ninth century, and perhaps a little later, whether found in Britain or on the Continent.

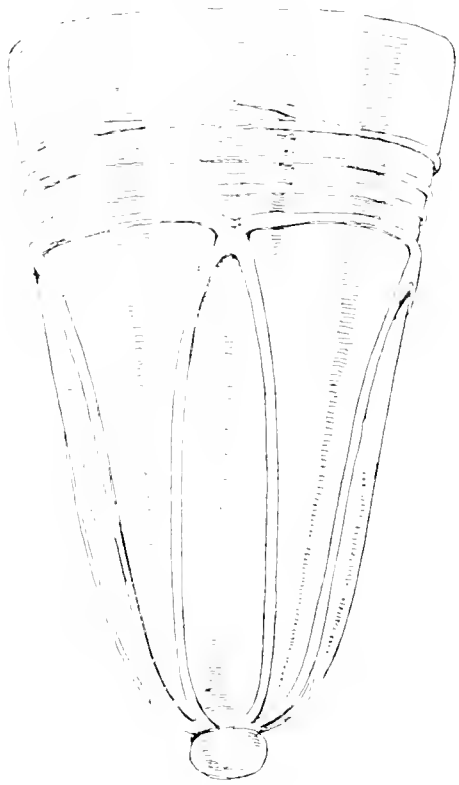


FIG. 31. (One half.)

It will be remembered that in the Old English epic poem of *Beowulf*, first written in portions, some probably before the fifth century, one of the bards speaks[1] of "hroden ealo-woege," twisted ale cups; it has been thought that the expression refers to glass cups spirally stringed, as some examples are. The fact of this variety being decorated in accordance with late Roman types, might tend to place some of the "twisted" ale cups among the earlier kinds. Whether certain forms are to be assigned to particular tribes, intrusive or otherwise, is an intricate, difficult, and large question, which obviously suggests itself, but which cannot be entered upon here.

Allusion has already been made to the probability of the Romans having made glass in Britain. Whatever doubt there may be on this point, one would like to think that there should be very little as regards Saxon glass-works in this country; but it is again a fact that evidence is wanting. Cups of the kind we have alluded to have been found in England in greater number and variety than elsewhere, thus favouring the supposition, as regards some of them, of local manufacture, which is also somewhat supported by the character and colours of the metal. They will be spoken of again, and illustrated in the body of the present work.

[1] Line 995. The poem was published by Kemble in 1837, with an English translation; a more convenient edition was brought out by Thorpe in 1855. The late Mr. Green, in his *Making of England*, p. 162, quotes Mr. Sweet (Hazlitt's *Warton*, vol. ii. p. 10), showing that the poem possesses a distinctly Christian element contrasting plainly with the general heathen current of the whole. Mr. Sweet considers it certain that the original work was composed before the Teutonic conquest of Britain. As it now stands, with its additions and alterations, it is a literary monument of the eighth century.

7.—VENETIAN GLASS.

VIII.—VENETIAN.

We must now quit the tombs and the graves and come into the light of day, still, of course, without the aid of documents; and we enter upon a new phase of the art of glass-making on a *quasi* new site, and which was destined eventually to exercise an extraordinary and far-reaching influence upon all the glass furnaces of modern Europe.

Of the two conjectures put forward for the origin of the Venetian glass manufacture, the one is that the art was brought by the fugitives from the mainland, fleeing before Attila—"fleau de Dieu," and the sword of the Huns in the fifth century; the other being that it was learnt from the Greeks of Byzantium at a much later date. There is no evidence as to whether the mosaics in Venetian churches previous to the thirteenth century are the works of native or Byzantine artists, though probability and artistic considerations point to the latter source. The great undertaking of covering the interior of St. Mark's with mosaic in the last quarter of the eleventh century had, highly probably, "a most important effect upon the manufacture of glass in Venice," for, as Mr. Nesbitt truly says,[1] "if the manufacture had already existed, it would unquestionably have received a great impulse therefrom; if it did not exist, the presence of Byzantine artists and workmen skilled in such matters would lead in the most natural manner to the discovery that the lagunes, possessing both abundance of fine sand and of maritime plants yielding alkali, were well fitted for the seat of a manufactory of glass."

It has been supposed that the taking of Constantinople in 1204[2] gave the Venetians an additional opportunity of obtaining knowledge from the Greek glass-makers. However that may have been, we know that the Venetian *vitrarii* had already formed themselves into a corporation as early as in 1268, and in 1275 certain laws were enacted prohibiting the exportation of sand and other substances used in the process of glass-making. At the end of the century it is believed that the glass-makers quitted the "Città di Rialto"—that is Venice, and established themselves at Murano.[3]

It seems that the Venetians were actively employed during the fourteenth century in bead-making and imitation jewellery, apparently somewhat to the prejudice of progress in the making of glass vessels. Of the latter objects no examples that may be assigned either to the thirteenth or, with two precious exceptions in the British Museum—one of them the work of Magister Aldrevandinus,[4] and each inspired both as to form and decoration by Oriental glasses—to the fourteenth century, have yet been noticed as Venetian art (Plate 7). And there are good reasons for believing that glass vessels were not exported from Venice into northern Europe during the thirteenth century; they do not occur in documents of that date with glasses from the Orient. But as early as 1376 the noble character of glass-working—the "ars tam nobilis"—was recognised, marriage of a noble with the daughter of a *vetrajo* being ruled as no impeachment of nobility in the offspring. The "gentilshommes verriers"

[1] Introd., *Slade Cat.*, p. xxxiv.

[2] See p. 19.

[3] Introd., *Slade Cat.*, p. xxxv.

[4] These cups are respectively inscribed in enamel, ✠ MAGISTER · ALDREVANDIN' · ME FECIT · and ✠ DNA : MATER : REGIS : ALESSIME : ORA : P : PA

of Altare and France will be spoken of in their proper places. The expression "no impeachment of nobility" connotes the gist of the matter.

During the fifteenth century the making and decorating of glass vessels must have steadily advanced, and special interest now attaches to the art because the earliest purely Venetian glass cups that are now known belong to this century. Such is the notable standing cup and cover, 16½ inches high, with bands and dots of different colours in enamel, wrythen gilt ribs on the bowl and like vertical ribs on the foot (Fig. 32); a smaller version, 6½ inches high, of sapphire blue, is decorated with gold and white enamel, and has a fluted stem and foot of powdered gold; both these choice vessels are in the Slade Collection. Another example, also without a cover, in horny-tinted glass and of extreme lightness, is at Chatsworth. A blue cup, enamelled and gilt, dating about 1440, with medallion portraits of a man and a woman, perhaps a "coppa nuziale," is in the Museo Correr, or Museo Civico, at Venice. Another, 8¾ inches high, in emerald green, with a foot and knop, like a fifteenth-century silver chalice, and rich with sprinkled gold, and similarly bearing two portraits in medallions, is also in the Slade Collection (Fig. 33). To the middle of the century belongs the standing cup, 6½ inches

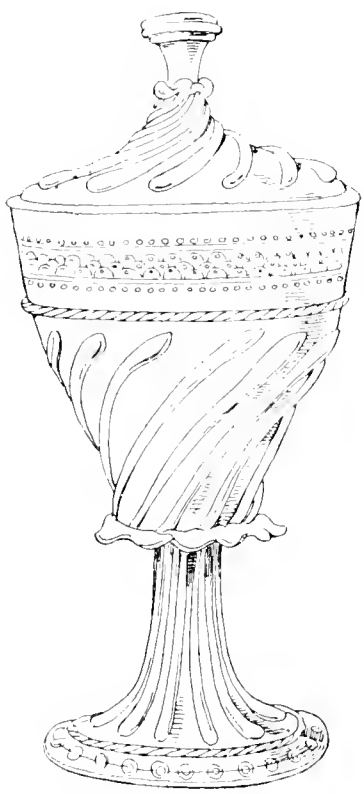


FIG. 32. (One quarter.)

FIG. 33. (One quarter.)

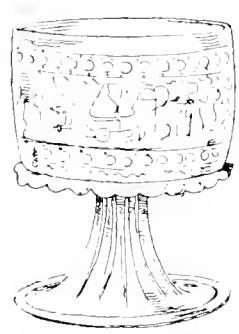


FIG. 34. (One quarter.)

high, of fine sapphire blue, with ribbed and gold-powdered foot, in the same collection. Round the bowl is a procession including two triumphal cars, Venus, Hymen, and several female and other figures (Fig. 34). Another and still finer example, a late fifteenth or early sixteenth-century procession glass, 8½ inches high, in lovely emerald green, with gold-sprinkled and ribbed foot, is preserved in the Städtisches Kunstgewerbe Museum at Cologne. A triumph of Venus is represented with a number of figures on horseback and on foot in coloured enamels delicately treated. This is inscribed round the edge: ASAI DIMANDA CHI SERVANDO TACE.

All these are noteworthy and, for the material, somewhat massive glasses, while the general resemblance that their forms bear to the silver standing cups of the period—more familiar to us, unfortunately, through the descriptions of inventories than in actuality—must not be overlooked. The glass-workers of the fifteenth century had not as yet emancipated themselves from current Gothic shapes, and the many Venetian standing bowls and tazzas which have been preserved, ornamented with gilded and highly decorated imbrications or

scales, and which distinguish the productions of the latter part of the fifteenth century, point rather to the familiarity of the makers with the decorations and barbaric splendours of the Orient, than to long-descended traditions from classical times.

The Roman working of "millefiori" and "vitro di trina" glass has already been spoken of. Ancient examples show us that the Romans had nothing more to learn in any branch of the art, save in the development of reticulated glass in which the Venetians, with larger furnaces, better "plant," and the accumulated experience of centuries of quiet work and with good Roman models to start from, have certainly gone beyond them. And as to the suggestion that the Venetians derived their knowledge of these ornamental processes by uninterrupted transmission, it has been seen that the earliest glasses of Venice—recognised with certainty as such—that have survived, date, with very few exceptions, no earlier than in the fifteenth century; and that these, far from bearing any inherited resemblance to classical models, are not much more than heavy imitations, as nearly as the rapid manipulation of the different material would allow, of the silver cups of the period, with not a trace of direct classical influence in their forms or in their handling. We are consequently driven forward upon the influence of the classical revival which, in the latter part of the fifteenth century, affected the glass-workers of Murano, and in this way brought about the close study of ancient examples. As there was now a "Renaissance" generally of all arts, so there was particularly a new birth in that of glass-making at Murano; in its long history there are of course many "points de départ"; this is certainly not the least interesting of them, and may not be lost sight of.

The heavy covered cups of Gothic forms, and the rich and gaudy imbricated or scaly bowls and tazzas, have now somewhat given way before the revival of classical shapes, and to this time and the earlier part of the sixteenth century may be specially ascribed the vases and vessels of Venetian work, "whose elegant forms"—as Mr. Nesbitt justly says—"have ever made them the delight of all who have a true feeling for beauty." But these things, precious as they are in our day, were even more highly esteemed four hundred years ago. This point, if, indeed, we could not readily imagine it, is amply testified to by the cotemporary relations of late fifteenth-century travellers, such as William Wey,[1] Fellow of Eton, who died in 1474, and Felix Faber of Ulm, who was at Venice 1484, and the evidence of inventories. Bertrandon de la Brocquière mentions with admiration the glass-houses of Murano in 1432, and it is stated by Leandro Alberti that in the first quarter of the sixteenth century there were twenty-four glass-houses working at Murano. The Republic had already distinguished the corporations of glass-makers by conferring privileges and immunities upon those that practised the art, and by placing them solely under the immediate jurisdiction of the Council of Ten, while in 1547 precautionary measures were adopted to prevent the mystery from being carried abroad.

The following interesting account of the state of the art in Murano about 1495 is given by Marcantonio Coccio Sabellico in his book *De situ Venetae Urbis*:—

Murianum inde vicus, sed qui, aedificiorum magnificentia et amplitudine, urbs procul spectantibus appareat; longitudine ad mille passus patet; vitrariis officinis praecipue illustratur. Praeclarum inventum primo ostendit vitrum posse crystalli candorem mentiri; mox, ut procacia sunt hominum

[1] He advises the pilgrim to the Holy Land, when taking ship from Venice, to provide himself with "dysches, platerrys, sawserrys, and other cuppys of glas."—Introd., *Slade Cat.*, p. xxxviii.

ingenia, et ad aliquid inventis addendum non inertia, in mille varios colores innumerasque formas coeperant materiam inflectere. Hinc calices, phialae, canthari, lebetes, cadi, candelabra, omnis generis animalia, cornua, segmenta, monilia; hinc omnes humanae deliciae; hinc quicquid potest mortalium oculos oblectare; et, quod vix vita ausa esset sperare, nullum est pretiosi lapidis genus quod non sit vitraria industria imitata; suave hominis et naturae certamen. Quid quod et murrhina hinc tibi vasa sunt, nisi pro sensu sit pretium. Age vero cui primo venit in mentem brevi pila includere omnia florum genera quibus vernantia vestiuntur prata. Atqui omnium gentium haec oculis maritima subjecere negotia, ut, quae nemo alioquin credibilia putasset, jam nimio usu vilexere occeperint. Nec in una domo aut familia novitium haesit inventum; magna ex parte vicus hujusmodi fervet officinis (Lib. iii.)[1]

There is documentary evidence of the arrival of small quantities of Venetian glasses in England in 1399, and in the Low Countries five years earlier; but it is important to notice from Sabellico's account to what an extent the importations from Murano had increased a century later.

Allusion should be made to the extreme rarity of Oriental porcelain—the *purslane* of contemporary inventories—in Europe in the early part of the sixteenth century, and it may be pointed out that, while majolica was then only approaching its highest perfection, the other earthen manufactures were of a very rude kind. Roughly speaking, their grotesque character continued in England until after the middle of the eighteenth century, when porcelain works were founded at Bow, Chelsea, Derby, Worcester, Plymouth, and Bristol, and Wedgwood ware introduced. This was long after our native-made glass vessels had acquired a distinct and excellent quality. It was not, therefore, surprising that those who were able to afford it gladly availed themselves of the new and beautiful manufactures of Murano, so much more plentiful and more readily obtainable than the tasteful Italian pottery, because even gold and silver cups and vessels, with which the great men surrounded themselves in such profusion in the latter part of the fifteenth century—the inventories of one of the heroes of Agincourt, Sir John Fastolfe, give us a typical case—were apt, perhaps, at last to become a little monotonous, and the crude English pottery and other rude vessels were quite impossible at comparatively well-ordered tables, and even accorded ill with pewter garnishes.

Hence the exportation of Venetian glass to northern Europe as a recognised article of luxury, from the latter part of the fifteenth century, is an important and interesting fact from many points of view. Italy, for the second, and not for the last time in the world's history, as we shall duly see, sent glass to England, and the English goldsmiths were not slow to beautify the Venetian cups with their famous silver and gold harnessings or garnishings, nor were French and Flemish artificers deficient in this respect.

Henry VIII. was a large patron of the glasses of Murano, and we find from a valuable document, giving the inventory of the king's glasses, etc., at Westminster in 1542, that he possessed a variety of 371 glass vessels comprised in a list specially interesting,[2] because it gives an idea of the kind of objects in glass of the highest quality which were made in the early part of the sixteenth century. The schedule includes bottles, flagons, basons, ewers, layers, cups, goblets, glasses, cruses, candlesticks, casting bottles, plates, dishes, saucers, etc., and shows in what way the goldsmiths dealt with many of them.

This inventory may be contrasted with the following account, by René François, Chaplain

[1] Quoted with a translation in Introd., *S. K. Cat.*, p. lxxxiv.

[2] Appendix, Inventory, No. III.

to Louis XIII. of France, of about half a century later, of the fantastic forms and gaudy colours which some of the Murano glass vessels exhibited :—

Mourano de Venise a beau temps d'amuser ainsi la soif et remplissant l'Europe de mille et mille galanteries de verre et de chrystal fait boire les gens en dépit qu'on en ait ; on boit un navire de vin, une gondole ; on avale une pyramide d'hypocras, un clocher, un tonneau, un oyseau, une baleine, un lion, toute sorte de bestes potable et non potable. Le vin se sent tout étonné prenant tant de figures, voire tant de couleurs, car dans les verres jaunes le vin clairet s'y fait tout d'or, et le blanc se teint d'écarlate dans un verre rouge. Ne fait-il pas beau voir avaler un grand trait d'écarlate, d'or, de lait, ou d'asur ?[1]

Somewhat similar contemporary conceits are observable in the jewellery, much of it from Nuremberg and Augsbourg, inspired by Florentine masterpieces of earlier times, but usually attributed to Italy, in the adaptation of large misshapen and "brocky" pearls for human and other bodies, and in the odd fancies of silversmiths—the *nef*, the *navire*, was, of course, of well-known mediaeval origin—in the often most inappropriate forms of their cups and other ornamental objects for the table. It was the age of conceits and crotchets from which even architecture and sculpture, as well as literature, were not exempt.

The remarkable custom, common to all European countries during the sixteenth and seventeenth centuries, of breaking the glasses at festive gatherings did not exclude the delicate productions of Murano. It is thus alluded to[2] as early as in 1593 in the description of a banquet given at Mantua in 1591 at the marriage of the Prince of Mantua :—

Vi erano oltre le ricchissime credenze e bottigliarie ordinarie una prospettiva di diversi bicchieri, carrafe, e giarre, e altri bellissimi vasi di cristallo de Venetia, che credo vi fussero concorse tutte le boteghe di Morano ; e di cio ve n'era di bisogno poiche tutte le signore convitate doppo che havevano bevuto rompevano il bicchiere che tenevano in mano per segno di grande allegrezza.

Following the fifteenth and early sixteenth-century enamelled vessels are the cups and glasses painted and partially burnt in, and others, sometimes of great size, merely decorated with oil or varnish colour and gilding.[3] After the fifteenth century drinking-glasses were made so thin that they would not bear the heat of the enamelling furnace without losing their shape ; hence the employment of enamelling in the sixteenth century was generally limited to the thicker tazzas, bowls, etc., the decoration being of a much simpler kind than that of the preceding century. The same tenuity and fragility made Venetian glasses quite unsuitable for cutting on the wheel, and only for engraving with the diamond under such accomplished hands and tender touch as those of the sisters Roemer Visscher and Anna Maria Von Schurman.

The Venetians used every effort to keep secret the processes of their glass manufacture. The Inquisition of State, by the twenty-sixth Article of its Statutes of 1454, ordered that if any workman of any kind should transport his craft into a foreign country, to the injury of the Republic, and refuse to return, an emissary should be commissioned to slay him.[4] It is recorded that two workmen whom the Emperor Leopold (1658-1705) had induced to enter his states were so dealt with.[5]

[1] Introd., *S. K. Cat.*, p. lxxxvii.

[2] *Ibid.*, p. xli. This curious account of the banquet at Mantua is quoted by Mr. Nesbitt from the "Aggiunta," dated Venice, 1593, to *Il Trinciante* of Vicenzo Cervio.

[3] In the National Museum at Munich is a pair of these tall cylindrical glasses, 1 foot 9¼ inches high, probably from the Forest, painted and gilt, with expanded bases and lofty domed covers ; the paint tends to flake off like the rainbow-tinted patina of ancient devitrified glass ; they are "verres de parade" and not for use.

[4] Daru, *Histoire de la République de Venise*, tom. vi. p. 402.

[5] *Ibid.*, tom. iii. p. 152.

But the attractive offers of foreign states and the somewhat irregular employment of the artisans at Murano drew many of them away before the middle of the sixteenth century, particularly to the Low Countries, Germany, and France; indeed, it is recorded that few princes in Europe had failed before the end of the century, in spite of the precautions and threats of the Republic, to obtain the services of Venetian glass-makers. These men, according to the circumstances of the respective countries, developed the rude lingerings of glass-making which had fitfully survived through the Middle Ages and from Gothic times, and of whose appearance in later days we gather most information, as we shall see, from early pictures. Or they founded new furnaces, subsidised by princes and governors, and they fashioned far from Venice Venetian glasses, soon to be copied by Flemish, or German, or French workmen as "verres façon de Venise." These shortly appeared on sixteenth and seventeenth-century sideboards, or were cherished, as they are to-day, in the cabinets of artists and collectors. They animate the conversation pieces of the golden age of artistic costume, and the pictures of still-life of countless Dutch masters; they shine from the panels of Terburg and the canvases of Van Der Helst, and give the *motif* to many a brilliant and joyous Dutch interior.

With regard to their gentility or "nobility" it appears that every glass-maker of Venice, Murano, or Altare entitled himself a "gentleman glass-maker," although he might be no more than a simple journeyman working for wages; and that, according to these pretensions, the practice of glass-making conferred nobility, and the privileges attaching to it, wherever the art might be practised. Such claims were naturally resisted as early as in 1581 in countries not affected by Venetian customs. The case was that Venetian glass-makers did not become noble in foreign countries because of their occupation, but being already "noble," they so remained although following a trade. Mr. Schuermans puts the matter thus:—In France and the Low Countries they were "noble" *although* glass-makers; in Venice they were noble *because* glass-makers; and at Altare they were glass-makers *because* they were noble, none of lower status being there permitted to exercise the art.[1]

Whatever may have been the disposition of the Venetian Republic with respect to the personal liberty of Venetian glass-makers in some foreign lands, as, for instance, in England, and if it is true that these authorities went so far as to compass the murder of two errant Muranists so late as under the Emperor Leopold (1658-1705), it is certain that such capital measures were not dealt out to Venetians in the Low Countries from 1540 to an advanced period of the seventeenth century. However much averse the Council of Ten may have been to so many of their citizens fabricating abroad the art which was practised with so much credit and profit at home, their number and their scattered state made it impossible to control them. Moreover, reasons of high policy, the Imperial protection accorded to Venice in the war against the Turks, and the alliance between the Republic and Charles-Quint in 1538, for instance, probably contributed to cause the Venetian authorities to depart from the rigour of their statutes. Apart from these considerations,

[1] "Il y avait donc trois sortes de noblesse verrière: (*a*) En France et aux Pays-Bas, les nobles *quoique* verriers; (*b*) à Venise, les nobles *parce que* verriers; (*c*) à Altare, les verriers *parce que* nobles." H. Schuermans, *Bulletin des Commissions Royales d'Art et d'Archéologie*. "Verres à la Venetienne fabriqués aux Pays-Bas," Lettre III., p. 23. *N.B.*—The pages quoted in the references which will be made to M. Schuermans' Letters are those of the different volumes of the *Bulletin* in which they are comprised.

the wishes of sovereigns as expressed by the document of 1623, "Tous les Rois et Princes désiraient et affectaient avoir en leur royaulme cette science,"[1] and the "force of public opinion"—so often evoked at the present day—must have gradually led to tolerance.

On the other hand, the Altarists were troubled by no patriotic scruples; the emigration to all parts of Europe of the Venetian-taught glass-makers of Altare—the descendants of the colony of strangers from Normandy settled in Montferrat in the eleventh century—was simply a matter of business and profit, to which ignoble end, indeed, the action of the Council of Ten was also directed. Thus the services of the men who practised at Altare, the "ars tam nobilis" of the fourteenth-century Muranists, were in the sixteenth and seventeenth centuries regulated by special contracts and sold for money, yearly payments being made to the Consuls of Altare.[2]

In every country to which the Venetians or the Altarists came the glass industry received an impetus for good, and was certainly carried at first in a more artistic direction than would otherwise have been the case. From this influence, through the force of local habits and requirements, it naturally and gradually fell away in every country, taking new inclinations, both in form and in substance; and with such success that, in the early part of the eighteenth century, special means were taken by the Venetians in their turn to imitate the lustrous cut glass for which Bohemia—where nothing was owing to Venetian teaching—the Low Countries, and England had become so justly celebrated, and which fashion then demanded. The famous Briati, who died in 1772, learnt Bohemian methods in a Bohemian glass-house, and practised them, not without opposition, in Venice itself.

The gradual decay of the "gentlemen glass-makers" in the Low Countries coincided with that of the art which they practised, and the archives of Liège furnish a good example of what took place everywhere. As taste changed, furnaces "à la façon de Venise" were one by one extinguished. Venetians, other Italians, and Altarists became fewer by degrees; pride of nobility was slowly laid aside in the struggle for a maintenance; they sank into

[1] Houdoy, *Verrerie à la façon de Venise: la fabrication flamande d'après des documents inédits*, Paris, 1873, Document XI. de 7 Janvier 1623.

In France numerous edicts were issued against the plebeians who attempted to lay claim to nobility. For instance, in a Decree of the *Cour des Aides* at Paris, September 1597, the following occurs:— . . . "from the mere fact of working and trading in glass ware, the glass-makers could not claim to have acquired nobility, or right of exemption; nor, on the other hand, could the inhabitants of the locality assert that a nobleman was doing anything derogatory to his title by being a glass-maker." Nothing could be plainer, and it is stated in Article II. of the foundation Charter of the glass-works of Saint Gobain in 1665, that Du Noyer might take as co-partners even nobles and ecclesiastics without derogation of their nobility. The practice of glass-making in France gave neither a right to plebeians, or bore forfeiture to nobles, and, inasmuch as the science was not included in the list of prohibited trades, it could be carried on by the latter without loss of dignity, and being from their position free from the countless imposts which oppressed the bourgeois, French nobles could thus re-establish their fortunes by making use of their forests, or by leasing them to plebeian glass-makers. The points are set forth by Sauzay, *Marvels of Glass-Making*, p. 38 (translation), no date; and the whole subject is fully and admirably treated by M. Garnier, supported by a series of original documents in *Histoire de la Verrerie*, p. 174, edit. 1886.

[2] It is believed that glass-making was first practised at Altare, in Montferrat, about 10 miles from Genoa, in the eleventh century, by emigrant glass-makers from Normandy, Brittany, and perhaps Flanders. Venetians came from Murano early in the fourteenth century to instruct the strangers in the Venetian practices. At an early date *consuls* were appointed at Altare, to whom was committed the control of the art of glass-making. The statutes were revised in 1495, and consist of nine articles; the first includes the yearly appointment of six consuls to carry out the regulations.—H. Schuermans, *ut sup.*, Lettre VII., p. 329. The statutes have been printed by Enrico Bordoni, *L'industria del vetro in Italia* (L'arte vetraria in Altare), p. 101.

the ranks of mere workmen, they became coverers of wickerwork bottles, etc., and were soon merged into the masses.[1]

Venetian ornamental glasses are of great variety, and their forms do not readily submit to verbal description. Nothing less than illustrations, such as are so well presented in the Slade Catalogue, will suffice. Sir Wollaston Franks has divided them into six classes:—I. Vessels of colourless and transparent glass, or of single—that is, self-colours. II. Gilt and enamelled glasses. III. Crackled glass. IV. Variegated or marbled opaque glass, the *schmelz* of the German. V. Millefiore or mosaic glass; and VI. reticulated, filigree, or lace glass,—vitro di trina; the two last classes in their ancient aspects have already been alluded to. The manufacture of filigree glass was greatly extended by the Venetians, and several writers have explained in what manner the most delicate and intricate results were produced by simple means employed with the greatest dexterity and refinement of manipulation.[2] The general outline of the process is as follows:—

Canes of coloured filigree and transparent colourless glass are arranged side by side around the interior of a circular metal or earthenware mould. They are heated near the furnace, and when they can be touched by hot glass, a bubble of clear glass is blown into the middle; to this the canes adhere, and the whole being taken out of the mould, a band of glass is placed over the canes now forming the exterior surface of the cylindrical mass. It is then fashioned in the fire in the usual way into any form that may be desired. An appearance of greater intricacy could be obtained by welding two cylinders together, the one inside the other, and of which the lines of the canes ran in contrary directions. At each crossing of the canes a bubble of air would be captured, and repeat itself at regular intervals according to the form which the mass would be made to assume. Doubtless the most striking of all old and modern works in glass are the Venetian vessels in vitro di trina; in them the capabilities of glass are pushed to their utmost limit, and their minute delicacy and perfection of handling indicate that human workmanship could not possibly be carried any further. Probably the greater part of the fine Venetian glasses that have been preserved belong to the seventeenth rather than to the sixteenth century; for obvious reasons of manufacture they are almost as difficult to date within half a century as ancient Roman or Anglo-Saxon glass.

IX.—THE LOW COUNTRIES.

Allusion has already been made[3] to certain glasses of Merovingian or Frankish times, based upon late Roman models, and known to us through the medium of the graves. If a large number of those glasses, fragile and widely distributed though they are, were really fashioned in the Rhine district in or about the sixth and seventh centuries, the probability would seem to be that in the ages following the dismemberment of the monarchy of the Frankish king Clovis in 511, the glass manufacture would have been continued within the same sphere. The

[1] H. Schuermans, *ut sup.*, Lettre V., p. 222.

[2] Labarte, Pellatt, Sauzay, Bontemps, Garnier.

[3] Page 22.

tendency, indeed, of historical events would have been rather to localise and gradually to limit the area of this special glass-making district, so that probably Cologne and Coblence—*Colonia Claudia* and *Confluentia* of the Romans—and where glass was certainly made in Roman times, Trèves—*Augusta Trevirorum*—and Aix la Chapelle—*Aquisgranum*—marked out, with the natural boundaries of the Rhine and the Moselle, a glass-making territory from which, working after, and gradually falling away from, Roman traditions, the countries far and wide on both banks of the Rhine, and possibly England to a limited extent, were supplied for centuries with the greater part of the glass vessels that were then used in northern Europe. The supply was apparently in a continually decreasing quantity, at least after the seventh century. Hence the extraordinary resemblance during so long a period between glasses found in districts so widely separated from each other, as, for example, Kent and Dalmatia, would be more than partially accounted for. The variety of the forms which, within certain limits, the drinking-glasses took during the Merovingian and Carlovingian periods from the latter part of the sixth to the end of the tenth century, is not less remarkable than their gradual disappearance, owing to political and other causes which cannot be entered upon here.

It would be unreasonable to suppose that, with so long a record, glass-making was not pursued at all in the Low Countries after the tenth century, because it is in the nature of things that an established, though seemingly declining, manufacture would linger long before its extinction. But was it extinguished? We have, unfortunately, no local documentary proofs or material evidence of the continuance of glass-making in this region in the period following the tenth century, but we have apparent testimony of it from a distant source.

In the commune of Liguria, about 20 miles west of Genoa, and 10 from the sea, is the small town of Altare, in the province of Genoa, and forming part of the ancient Marquisate of Montferrat. According to the traditions of Altare, French and Flemish emigrant glass-makers were allowed to settle there, with certain privileges, in the eleventh century, to practise and teach the Altarists the art for which the place subsequently became so famous.[1] This sounds a little startling at first. The truth of the tradition has perhaps been somewhat prejudiced by too precise relation and expansion; but, weighing physical characteristics and linguistic peculiarities with deliberation, and without trying to get more out of the story than it may properly give, there seems to be no reason for casting doubt on the main proposition. It is interesting also in another way as giving, presumably, the first indications of the system of the movement, the borrowing, or the enticing of glass workmen from other countries which, carried centuries after to so great an extent, brought about one of the most remarkable art movements which the world has witnessed. The point will be touched upon again later on in dealing generally with France.

With regard to the form which the Low Countries' glass vessels took from the tenth to the twelfth century we have no certain information. The probability is that during this period very little was made, and, as in Germany, that little only in the form of small and unimportant

[1] "Le *Dizionario corographico dell' Italia*, d'Amati, i. p. 237, nous apprend qu'Altare, commune de la Ligurie, province de Gênes, dépendait vers le XIe siècle des Marquis de Montferrat, et que ceux-ci concédèrent à des émigrés français de Bretagne et de Normandie le privilège d'y exercer l'industrie verrière et accordèrent à leurs familles la noblesse et la magistrature consulaire par un statut particulier," quoted by the President Schuermans, *ut sup.*, Lettre I. p. 135. At a glass-makers' fête held in 1882 at Altare the programme recalls that the art was initiated at that place in the tenth century by emigrants from Flanders as well as from France.—*Ibid.*, Lettre III., p. 25.

vessels. Glasses of price would have been obtained from the East. We have no longer the testimony of the graves, and it can be readily understood that vessels of moderate size for ordinary use, and in a material that could be re-melted as "cullet," would, when broken, leave very little trace, and by the lapse of centuries perish out of sight. But there is reason to believe that a reaction had set in, and that improvement was slowly going on both in the Low Countries and in France, because glass-makers from both countries are believed to have had something to teach the Altarists in the eleventh century.

Reference has been made to a special and ancient glass-making district in the neighbourhood of the Rhine and the Moselle as providing glass vessels in early times for much of the requirements of a spacious district. Now, in various collections in Germany are preserved small glass vessels which have been discovered embedded or built up into altars, following a common mediaeval practice for the enclosing of relics. It may be taken for granted that such glasses were new when they were so applied, and, at least in those times for such a purpose, good examples of the current art. This being the case, when a vessel of the kind is

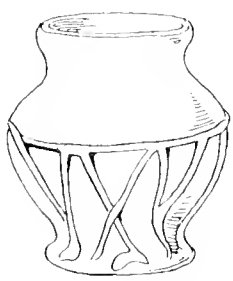


FIG. 35. (One half.)

FIG. 36. (One half.)

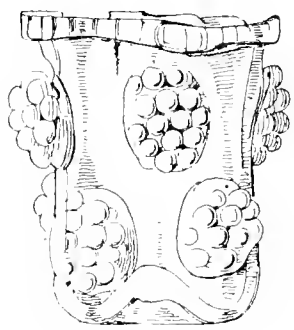


FIG. 37. (Full size.)

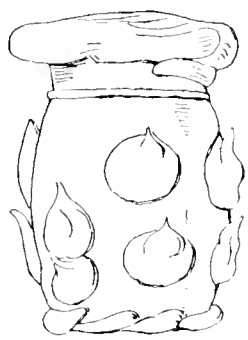


FIG. 38. (One half.)

found, containing not only the precious remains but also a parchment giving the date of the deposit, and the name of the bishop under whose hand the valued objects were so deposed, the glass itself becomes a relic,—more significant indeed for the present purpose than the very memorials themselves which it enshrines. To take a noteworthy example,—such a glass containing relics and a testifying document (*Urkunde*) in Latin on parchment, with the bishop's seal attached and giving the date 1282, was found in a hole formed in the substance of the ancient stone altar of the Church of Michelfeld, near Hall, in Württemberg, in 1889 (Fig. 35). The clear green glass, nearly 3 inches high, is of that sort which indicates its *provenance* from the glass-making district near the Rhine, before alluded to, and more than suggests in its rude traditional trailed decoration its remote ancestry in glasses of late Roman times. As a dated example in the history of glass-making both in the Low Countries and in Germany it is a connecting link of great value.[1]

[1] Die Urkunde lautet verdeutscht:—Im Jahre des Herrn 1282 am Sonntag nach dem Fest des heiligen Gallus des Bekenners wurde dieser Altar geweiht von dem ehrwürdigen Herrn Inzelerius, Bischof von Budua, zu Ehren der heiligen Apostel Petrus und Paulus und folgende Reliquien sind in diesem Altar enthalten:—Ein Stück Holz vom Kreuz des Herrn, von der Dornkrone des Herrn, etwas von der Erde, wo der Herr gebetet hat, von dem Stein, auf den das Blut des Herrn geflossen ist, von der Kette des heiligen Petrus, von dem Leib des heiligen Petrus, Ein Glied des heiligen Apostels Paulus, des heiligen Stephanus, des ersten Martyrers, der heiligen Martyrer Adon und Sennes, des Martyrers Theodorus und des Martyrers Simphorianus.—*Beilage zu dem Württembergischen viertelsjahres Heften für Landesgeschichte. Vom historichen Verein für Württem: Franken*, 1892. "Das Michelfelde Reliquien Glas," von Professor Gaupp, in Hall. It is preserved in the museum of this historical Society at Hall. Only two wood and two bone fragments were recognisable. The former were wrapped in pieces of red silk.

A tiny white glass, *circa* 1200, for relics, $1\frac{1}{4}$ inch high, and enclosed in a rude wooden box, is in the Baierisches National Museum at Munich (Fig. 36). Another relic glass, pale green in colour, $1\frac{5}{8}$ inch high, and ornamented with flat beady "prunts," was found in a coffin of an ecclesiastic in the ancient collegiate Church of St. John, at Liège (Fig. 37). In the same coffin was discovered the very delicate circular foot, up to the knop, of a glass chalice, the whole dating from the end of the fourteenth century. These objects are preserved in the Musée Archéologique in the Palais des Princes Évêques, at Liège.

In 1891 Herr A. v. Essenwein acquired for the Germanisches Museum a relic glass taken from an altar of a church in Vinstgaue in the Tyrol (Fig. 38). This is a clear bluish-green glass, properly called an Igel, decorated with "prunts" (*Stachel-Nuppen*) and is slightly oxidised. The mouth of the vessel is closed with wax and sealed with the seal of **s. stephani. epi. belline.** his episcopal title as suffragan of the Archbishop of Tirus. The glass has very properly not been opened, but through the sides can be seen the linen wrapping of the relics. They are further rolled round with a strip of parchment, upon which, as far as can be seen, is inscribed as follows :—

. . . millesimo quingentesimo decimo nono die
. . . mensis Julii nos frater steffanus ordinis predicatorum
. . . apostolice gracia episcopus Bellinensis consecravimus
. . . in honore sancti Michaelis et sancte Ursule et sancto
. . . decim auxiliatorum et inclusimus eo reliquias
. . . Steffani et sancte Ursule et sodalium ejus.[1]

It is to be observed that the small Nuremberg glass and the two Liège coffin examples among the above-mentioned vessels exhibit but slight indications of granular decay; the others, dated 1282 and 1519, are quite smooth and transparent. All these must have come from the Rhine district.

In a MS. Pontifical of a bishop of Metz of the first quarter of the fourteenth century, in the possession of the Rev. E. S. Dewick, is an illumination admirably showing the introduction by the bishop of the sealed and attested relics into the sepulchre of an altar—"Deinde ponat intra in confessionem tres partes de incenso cum litteris sigillo episcopi sigillatis; et tunc recludantur reliquie in confessionem."[2]

In consequence of the remarkable commercial prosperity which arose in Flanders, great improvements rapidly took place in glass-making. We find from an inventory of Charles V. le Sage, of France, of 1379, that he had "ung gobelet et une aiguière de voirre blant de Flandre garni d'argent." No doubt trade relations had already made the merchants of Bruges familiar with the beauties of Venetian glass, and caused their importation as early as in the middle of the century; at the end of it, in 1394, Philip II. le Hardi, Duke of Burgundy, paid for "seize voirres et une escuelle de voirre des voirres que les galères de Venice ont avant apportez en nostre pays de Flandre." In 1454 his grandson, Philip III. le Bon, bought certain glass objects from Gossuin de Vieuglise, a "maistre voirrier" of Lille.[3]

With such few and isolated proofs as have been referred to has the continuous story of glass-making in the Low Countries been brought down to the end of the fifteenth century. Less than fifteen years ago the means for carrying it later still were almost as slight; the

[1] *Mitteilungen aus dem germanischen Nationalmuseum*, Jahrgang 1891, s. 7.

[2] *Archaeologia*, v. 54, p. 419, Pl. XXXV.

[3] De Laborde, *Glossaire*, p. 545.

real history was sealed up in the national archives. The late M. Houdoy, author of *La Verrerie flamande à la façon de Venise*, was the first to direct attention to the mass of documentary evidence throwing light upon the manufacture of glasses after the fashion of Venice in the Low Countries. Ably followed as he was by M. Genard, state archivist at Antwerp, by M. St. Bormans, archivist at Namur, by M. van de Casteele, occupying a similar position at Liège, and by the late M. Pinchart, and all of them encouraged by the friendly pressure of the well-known Belgian antiquary, the President Schuermans, an entirely new volume of the art history of the country has been laid open and become available for use.[1] In addition, M. Schuermans has himself worked diligently and written largely upon the subject, *Les verres façon de Venise fabriqués aux Pays Bas*; and not only relating generally to the Low Countries, but particularly to the city of Liège, where he exercises his high judicial functions. He has also collected and published documentary and other evidence concerning the movements of the Venetians and Altarists, their connection with "foreign" glass-makers, and their work in every country of Europe which came under the influence of this great art movement.

According to a Venetian chronicle, *crystal glass* was invented by the Berovieros of Venice in 1463, and at once exhibited by them in different courts of Europe. An early notice of it occurs in the inventory of the goods of Charles le Téméraire, Duke of Burgundy, 1467-77—a glass and a pot of "cristallin." Mention is also made in the Duke's inventory of a number of vases of coloured glass, and among them "ung hanap de jaspre garni d'or à œuvre de Venise."[2] The new style, aided by the Renaissance, brought about the abandonment of heavy Gothic forms, and it appears probable that Venetians of the Ferro family, about the third quarter of the century, taught the Altarists the new processes of Murano. It is clearly confirmed that at the same time other Ferros made their way to the Low Countries, associated themselves with the fifteenth-century Flemish glass-making family of De Colnet, and with them first practised there the novel Venetian art of glass-making. From this time forward it gradually spread throughout the Seventeen Provinces; artistic glass-making was grafted by degrees upon an already existing, inconsiderable, and purely commercial industry, with three great centres—Antwerp, Brussels, and Liège, the Venetians mainly favouring the first, and the Altarists the last-named city after the sixteenth century. It flourished for nearly two hundred years and then as gradually passed away.

M. Genard has ascertained from documents that a glass-house was established at great cost—"begost met groote costen"—at Antwerp in 1537, and made "crystallynen glasen";[3]

[1] The author acknowledges the effect of the President Schuermans' encouragement, which caused him to extend the present effort far beyond its first contemplated range, and his obligations to him for his labours. In his eleven "Lettres," published, 1883-1891, in the *Bulletin des Commissions Royales d'Art et d'Archéologie*, Brussels, the "Premier Président de la Cour d'Appel" has availed himself of documentary and other information brought together by Belgian and Dutch authors and antiquaries, in addition to his own valuable comments and large independent researches; besides recording intelligence of a like nature concerning glass-making in England, France, Germany, etc., up to the end of the eighteenth century, with a twelfth and final letter upon enamelling.

[2] De Laborde, *Histoire des Arts Industriels*, tome iv. p. 572; V. Gay, *Glossaire*, vol. i. p. 498.

[3] H. Schuermans, *ut sup.*, Lettre II., p. 359. This glass-house was directed first by Luc van Helmont, then by Bernard Swerts and Jacques Steur; it is evident that these were purely Low Country "crystalline" glasses, and quite independent of any Italian hand in their manufacture.

"Lucas van Helmont met zynen medegesellen hier hebbende gebracht de neringe van cristalyn te maken, ende dat tot reparatien ende stoffe van eenen gelaesoven te zetten: Lxij lib. iij sc. iij den" (*Archives communales d'Anvers*).—Pinchart, *Les fabriques de Verres de Venise d'Anvers et de Bruxelles au XVIe et au XVIIe siècle*. Cap. vij. *Bulletin des Commissions, etc.*

these seem to have been rather glasses better than the common sort than direct imitations of the crystal glass of Venice; they were more crystal in name than in nature; in fact, we gather that the first establishment of an Italian, Cornachini, in the Low Countries was at Antwerp in 1541, privileged by Charles-Quint to make "cristallyne en staele spiegels," that is crystal and steel glasses. This was perhaps the glass-house alluded to by Gramaye, who was born in Antwerp, and first published his book in 1607—"Cum officinas vitrorum anno 1541, tapetiorum 1544, et alias circa id tempus coepisse didicerim."[1] A document was discovered by M. Pinchart showing that eight years later, in 1549, Jean de Lame, of Cremona, was authorised to establish at Lierre, near Antwerp, or in any other place, "où mieulx il trouvera sa commodité, l'art et science de faire verres de cristal à la mode et façon que l'on les labeure en la cyté de Venise." This was two years before a similar privilege was granted by Henry II. of France to Thesio Mutio, glass-maker of Bologna. Jacomo di Francisco, of Venice, obtained in 1556 the continuation of the concession granted to de Lame, and he relinquished it two years later to Jacomo Pasquetti, of Brescia, who, in 1558, as far as documents tell us at present, first made drinking-glasses "façon de Venise" at Antwerp and in the Low Countries. M. Houdoy quotes from a document of 1569—"Ung hault verre de cristal d'Anvers ayant le pied et le couvercle d'argent doré par dedans, armoyé des armes de Molenbais."[2] This was perhaps a production of Pasquetti.

The Principality and Bishoprick of Liège, though embedded as it was in the Provinces, formed a part of Lower Germany until 1815, when it was united to the Netherlands. For art reasons we have treated it throughout as part of the Low Countries, as, indeed, geographically it strictly was. That glass was being made at Liège of artistic quality, but not of Venetian fashion, quite early in the sixteenth century is apparent, because in an inventory of Margaret of Austria, Governess of the Low Countries, drawn up in 1523, mention is made of "un grant verre vert, le couvercle et le pied d'argent doré, donné par Monseigneur de Liège, Erard de la Marck."[3] Chapeaville, who was born in 1551, referring to the year 1569, speaks thus of the introduction of crystal glass-making into Liège, a fact of which he had personal knowledge: "Coeperat circa haec tempora vir ingenuus Nicolaus Francisci, Leodii ad ripam Mosae, in parochia ad divi Nicolai cristallina vitra conficere, Mosae alveo lapides pro materia administrante;" he adds that Francisci was "Italus."[4] Foullon, who wrote his book about 1650, tells us also that Nicolas Francisci established in July 1569 the first crystal glass-works at Liège. In 1571 Pasquetti of Antwerp caused to be seized two great barrels full of Venetian glass made in Liège—"Luycksche gelaesen gecontrefeyt naer de veneetsche gelaesen," which, having been sent for sale, struck a blow against the speciality of the Venetian glass-makers in Antwerp.[5] It seems that the Italians had at that time, and later, a monopoly of the manufacture in the Low Countries of "crystalline,"—that is, transparent white, as opposed to the old local greenish or yellowish glass; the latter never approached nearer to "crystalline" than "off-white," and for the most part was of a horny tint, and employed in the making of small plain cups for ordinary use such as may be seen in early Flemish pictures, and of which time has spared a very few examples (Figs.

[1] *Antverpia*, III. x., p. 24.

[2] Houdoy, *ut sup.*, p. 34. Inventaire des meubles délivrés par Antoine van Berghe, etc., le xi mars, 1569.—*Archives départementales du Nord.*

[3] H. Schuermans, *Verres Liégeois Façon de Venise*, p. 4.

[4] *Ibid.*, p. 7.

[5] *Ibid.*, *Verres à la Vénitienne*, etc., *ut sup.*, Lettre I., p. 146.

39-54). The green glass of Margaret of Austria must have been a superior vessel of Liège origin, and quite independent of Italian influence.

As soon as the separation of the United Provinces from the Spanish Low Countries was effected in 1579-80, the glass industry took an extended direction. Thus, in 1581, Godefroid Verhaegen left England, where he appears to have been working, and established glass-making

Fig. 39.

Fig. 40.

Fig. 41.

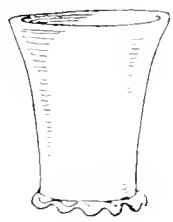


Fig. 42.

Fig. 43.

after the Venetian fashion at Middelburg in Zelande,[1] aided by runaway Italians from Antwerp. Mention is frequently made in petitions of this period of the expenses incurred in attracting "de longz pays les maistres ad ce nécessaires;" an Act of 1565 alleges the "grandz dépens excessifz sallaires et courtoisies"[2] and the other expenses necessary in obtaining, of

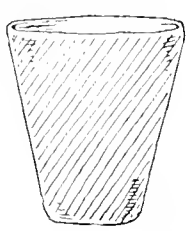


Fig. 44.

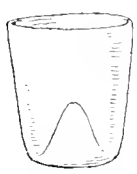


Fig. 45.

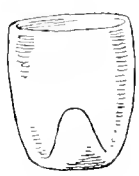


Fig. 46.

Fig. 47.

Fig. 48.

course secretly, glass-makers from Venice. During the terms of Pasquetti and his successors, Mongarda and Gridolphi, at Antwerp, the crystalline glass made there is described more than once in the privileges as the great ornament and honour of Antwerp, and of as good, and even better quality than at Venice—"Alhier alsoo ghoet ende betere dan tot Venegian vinden."[3]

Fig. 49.

Fig. 50.

Fig. 51.

Fig. 52.

Fig. 53.

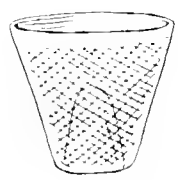


Fig. 54.

From a petition of Gridolphi, in 1607, it is shown that, while the entrance into the Low Countries of the glasses from Venice was not interdicted, those "façon de Venise" were only authorised to be made at Antwerp, Brussels, and Liège. *Apropos* of this point the municipal archives of Lille for 1620 give the following entry:—"A Paul Verhaeghe, pour plusieurs parties de verres, tant d'Anvers que de Venyse qui par lui furent livrées ceste présente année pour banquets faits en la maison échevinale." This item of expenditure occurs almost every year.[4] The grievance now was that the merchants obtained their *Venetian* glasses from places

[1] *Ibid.*, *ut sup.*, Lettre II., p. 371.
[2] *Ibid.*, pp. 366, 367.
[3] Génard, *Les anciennes verreries d'Anvers; Bulletin des Archives d'Anvers.*
[4] Houdoy, *ut sup.*, p. 34.

most convenient to them—it might be from Cologne, Paris, Mezières, London, etc.,—"où l'on pratique de contrefaire lesdits verres de Venise si ponctuellement qu'à grand peine les maitres eux-mêmes sauraient juger la différence." So there were in the Low Countries in the beginning of the seventeenth century real Venetian glasses, imported from Venice; Venetian glasses legally made in the Low Countries; those illegally made; and foreign imitations of Venetian glasses. The artistic distinction between the varieties of lawfully and unlawfully-made glasses, all inspired by Italians, or by Altarists, would be a nice question to solve. As to Venetian glasses generally, greater delicacy and refinement of manipulation should distinguish them at once from those made in the Low Countries. It is evident, on seeing some examples of the two kinds together, that similarity of form and handling will not produce the same results unless there is similarity of material also, yet the masters themselves could hardly tell the difference in 1607.[1] Moreover, Venetian soda-glass is much lighter than that made in the Low Countries with potash, both being free from the metallic oxides which distinguish glass of lead, as is also the fern-ash glass, "verre de fougère," which is the lightest of all potash glass, and will be spoken of in another place. "Verres de fougère" are always distinguished from crystal glasses, which were the specialty of the Venetians and the Altarists.

Again, in 1607, it was protested to the archdukes that certain workmen from Antwerp were suborned by Liège makers who sold their productions as Venetian wares. A Venetian glass-house was first set up at Brussels in 1623 by Miotti, a name well known at Murano. It was in opposition to the Antwerp furnaces which were extinguished in 1642 and re-lighted later with small success. Brussels ceased to make "verres façon de Venise" soon after 1713. In 1626 Italians were making at Liège crystalline and gilt glass, imitations of precious stones, and enamels in all colours. Precisely thus did the Altarists at Nevers in the centre of France.

From the foregoing notes it will be understood that the establishment in glass-houses of Venetians and Altarists had been accomplished in numerous cities and towns of the Low Countries before the second quarter of the seventeenth century. This had the effect of creating an artistic fabrication throughout these regions side by side with the already existing and purely commercial or industrial manufacture, such as the de Colnets, the de Bonhommes, and others directed in so many furnaces—as at Antwerp, Liège, Brussels, Ghent, Bois-le-Duc (s'Hertogenbosch), Maestricht, Mezières, Namur, etc. It was obviously to the advantage of local glass-makers that they should, either alone, or aided by Italians or Altarists, produce the new and fashionable artistic glass as well as continue to provide for the common glass requirements of the country. The peculiar interest of the great art movement is the rapidity with which it spread throughout Europe—"Tous les Rois et Princes désiraient et affectaient avoir en leur royaulme cette science," says a document of the time. The jealousies and difficulties which constantly accompanied its establishment in any part of the Low Countries have caused

[1] From various documents brought to light by M. Houdoy (see p. 31, note 1) it clearly appears that the privileges granted in the Low Countries for the manufacture of glass "à la vénitienne" amounted to no more than protection against foreign and local imitations; there was no prohibition of glasses direct from Venice. In Gridolphi's petition of 1607 he refers to his singular privileges—"parmi lesquels le principal est l'interdiction à tout autre qu'à Gridolphi de fabriquer des voires de cristal et de les contrefaire à la façon de Venise, ainsi que la défense absolue d'importer et de vendre dans les Pays-Bas tous autres verres faits à l'imitation de ceux de Venise." He adds that in spite of this privilege and prohibition "certains marchands, au lieu de faire venir leurs verres de Venise, les tirent à leur plus grand commodité des places les plus voisines, où l'on pratique de contrefaire les dits verres de Venise si ponctuellement qu'à grand peine les maitres eux-mêmes sauraient juger la différence." —Houdoy, *ut sup.*, p. 8.

the abundant accumulation of cotemporary documents, from which so much of the history of this artistic development has been only lately brought to light. To make full use of this material, and to follow the intricate account of the industry step by step over so wide an area through the seventeenth and eighteenth centuries, would clearly be quite beyond the compass of the present sketch.

Having seen the establishment, the most important point, of Italian art in glass in the Low Countries, and traced something of its course, it must be sufficient to add that it sustained no very appreciable decline until the last quarter of the seventeenth century. Then it fell away rapidly in public favour, and the first dawning in England of "Flint Glass," that is "Glass of Lead," between 1660 and 1663, gave the signal not only for an entirely fresh departure in glass-making, but also for the abandonment of the old artistic fashion, which had held its ground in the Low Countries for exactly two hundred years. The new style was hardly less far-reaching in its influence, or more rapidly adopted in foreign countries than had been the ancient crystal of Venice; and as at the end of the fifteenth century the novel art was inspired from two sources, so at the end of the seventeenth two sources supplied the Continent not only with the new mode, but also with a large part of the objects themselves, which were made after it. These bountiful origins were, first England, and then Bohemia—whose beautiful engraved artistic glasses were successfully competing with those of Murano;[1] the one acting under instinctive commercial promptings, and the other largely led in the same direction, owing to the cession by Spain to Austria of a great part of the Low Countries, through the settlement of the Peace of Utrecht in 1713,[2] and encouraged thereto later on by the patriotism and protection of the great Maria Theresa.

At once English Flint Glass was introduced into the Low Countries, and since 1680 the de Bonhommes, who in 1681 were making glasses "façon d'Allemagne," had engaged workmen to produce "Verres à l'Angleterre" at Liège.[3] In 1693 a furnace for Venetian glass was set up as a kind of last effort at Ghent, but, unable to struggle against the new fashion, it submitted in 1714 to that particular manufacture. Similarly, at Brussels, the lately-founded glass-house ceased at the same time. At Bruges, little beyond bottles were made after 1700.[4] Already in 1710 the de Bonhommes complained of the importation, ruinous to them, of Bohemian glasses

[1] "It was in Bohemia, however, about the beginning of the seventeenth century, that the pernicious pseudo-art of engraving and cutting in imitation of crystal originated. This was a retrograde step, the material of itself being capable, as the Venetians had already taught us, of the most artistic treatment, without imitating a treatment belonging to another substance and foreign to its own nature."—J. Fowler, *Decay in Glass, etc.*, p. 33; reprinted from the *Archaeologia*, vol. xlvi.

[2] Full and interesting accounts of this important treaty, which terminated the war for the Spanish Succession, and transferred the Low Countries from Spain to Austria, is given in Koch, *Traités de Paix;* Flassan, *Histoire de la Diplomatie française;* Ancillon, *Système politique de l'Europe*, and in the *Mémoires de Torcy*. The remarkable representation of the House of Commons concerning the war, presented to the Queen, and her not less remarkable answer to it, in her speech from the throne on 6th June 1712, are given in Swift's *Four Last Years of the Queen*.

[3] H. Schuermans, *ut sup.*, Lettre VII., pp. 323.

[4] The custom of bottling and "laying down" wine, which was of classical origin, was revived with the luxury of the Renaissance, and appears to have grown into general use in France before the end of the seventeenth century—"et ce n'est guère qu'à la suite des raffinements du luxe qui s'introduisirent à l'époque de la renaissance, que commença l'usage général des bouteilles en verre, non seulement pour contenir, mais pour y faire vieillir les vins."—G. Bontemps, *Guide du Verrier*, p. 495, edit. 1868. A *mémoire* of 1724 of the Académie Royale des Sciences of Paris runs as follows:—"Depuis que la mode est venue, surtout à Paris, de tirer et garder le vin en bouteilles de verre, il s'est établi, pour la fabrique de ce grand nombre de bouteilles, de nombreuses verreries qui n'ont presque point d'autre objet."—H. Schuermans, *ut sup.*, Lettre VI., p. 271. These bottles were of fixed and regular forms as distinguished from the often shapeless productions of the previous centuries.

into Liège. Before 1757 they gave up *crystal* glass-making there, but Nizet, who had started a furnace at Liège in 1710, continued to carry it on with some success. From the middle of the century Zoude of Namur, a pushing, vulgar, and boastful glass-maker, was a determined opponent of the Liège works. He produced a great quantity of glass of all kinds —including "Venetian," long after that fashion had passed away in the Low Countries— and, of course, the English Flint Glass. Suiting his productions specially to the taste of the time, he supplied Brussels, Louvain, Antwerp, Mechlin, Mons, Ghent, Tournai, and Paris. Liège was too well established to be shaken by Zoude.

Immediately after the Peace of Utrecht in 1713, a large number of merchants of Bohemian glass established themselves in the Low Countries. Drawing their supplies from warehouses

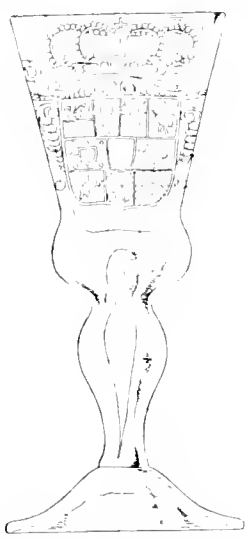


FIG. 55. (One third.)

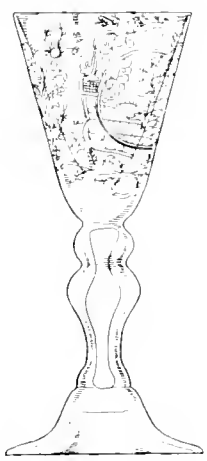


FIG. 56. (One third.)

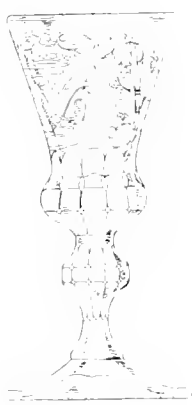


FIG. 57. (One third.)

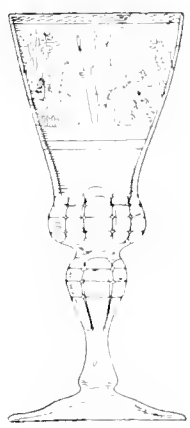


FIG. 58. (One third.)

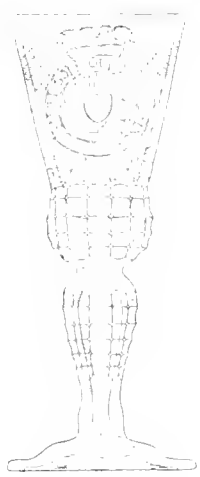


FIG. 59. (One third.)

at Antwerp and Middelburg, quantities of glasses from Prussia, Silesia, and the neighbouring districts, "which it was not possible to distinguish from those of Bohemia,"[1] were also introduced into the country (Figs. 55, 56, 57, 58). This influx continued during the long administration of Maria Theresa, and in addition large consignments of cut glasses came later on from England competing with it (Fig. 59), and from France, who was herself in 1760 wholly supplied with flint glass from this country.[2] No Venice glass was made at Ghent after 1710, but in 1711 François de Colnet made bottles and glasses "more anglicano," and for six years he sent them all over Flanders. In 1744 Maria Theresa entered Ghent as Countess of Flanders. For a banquet in her honour special glasses were made in Ghent, finely engraved by the wheel with armorial bearings, like those of Bohemia and Holland.[3] At a number of other places in Belgium, such as Charleroi, Barbançon, Saint Hubert, Ghin, etc., glasses were made chiefly under the direction of the de Colnets, in some places assisted by Englishmen, during the latter part of the seventeenth and to the end of the eighteenth century. These productions naturally followed the leading style of the times in which the works flourished, tempered by that of the district or place where they were carried

[1] "On introduit par ces bureaux toute espèce de verres présentés comme verres de Bohème; car, ainsi qu'on le déclare au Conseil des finances, on fait 'en Prusse et en d'autres pays' des verres qu'il n'est pas 'possible de distinguer des verres de Bohème.'"—H. Schuermans, *ut sup.*, Lettre VII., p. 324.

[2] Bosc d'Antic, who first published his papers in the *Mémoires de l'Académie Française* in 1760, states that the English sent four-fifths of their flint glass abroad, and that, in spite of its dearness and imperfections, the whole of France was supplied from this country.

[3] H. Schuermans, *ut sup.*, Lettre VIII., p. 471.

on, but were not of sufficient importance, like those of Liège for example, to react upon or affect the general taste. Many of the table glasses will be referred to when tracing the history of the English wine-glasses during the eighteenth century.

There would have been no significance in the action of the glass-makers of the Low Countries, when they took to working "more anglicano," if the English metal had not a few years before that time taken a new direction. They did not attempt the imitation of glass "à l'anglaise" of an earlier date, because it was of much the same character as they were themselves making, and would have offered no better foil or rivalry than their own productions to the Silesian or other German glasses which were so rapidly making their way into the Low Countries, and by their cheapness undermining the markets. In saying this, we are far from suggesting that "flint glass"—that is, "glass of lead"—had, in 1680, much advanced from its first stage, and some of the glasses which may be assigned to the last quarter of the seventeenth century illustrate this position. But after the middle of the eighteenth century it is often hard to distinguish by the metal alone an English-made from a Low Country wine-glass "à l'anglaise," such, for instance, as Liege and Amsterdam produced. This is the case as to certain types of the bell shape and the drawn forms. With others of essentially English fashions, such as the straight-sided, and the ogee, the difference is obvious at a glance.

The *Mémoires* of the Brussels Academy show that in 1785 nothing but common glass and table glasses were then made in the Low Countries, even the latter being also extensively imported.[1] In 1787 it was officially declared in the "Conseils" of the Low Countries: "We have ceased to make fine crystalline things; we have to get them from Bohemia;"[2] and in 1794 official documents state that no more glass goblets are made in the departments of Brussels, Antwerp, Ghent, and Bruges. In short, with the exception of works at Liège—which city had successfully adapted itself to the new style—artistic glass-making was clean wiped out from the Low Countries at the end of the eighteenth century; fully fifty years earlier Bohemian glass had become "le verre de luxe" throughout that spacious region.

Vonêche takes us out of the century and beyond our allotted period. On account of its brilliant though light imitation of English glass, which was not undertaken until after 1800, it had a great renown until 1826 when its furnaces came to an end. It was the parent of the fine crystal glass-works of Val Saint Lambert, 7 miles from Liège, and of Baccarat, near Lunéville. The productions of the latter glass-house are perhaps the best known, on account of the "dated examples" which are placed within the reach of sky-aspiring travellers at the top of the Eiffel Tower.[3]

[1] H. Schuermans, *ut sup.*, Lettre VIII., p. 381.

[2] "Nous ne faisons pas les ouvrages fins et cristallins; nous devons les tirer de Bohème."—*Ibid.*, *ut sup.*, Lettre VII., p. 326.

[3] The glass-house of Vonêche, near Givet, was founded about 1800 by M. d'Artigues. By the Treaty of 1815 it became outside French territory and transferred to the Low Countries. D'Artigues obtained the right of sending his glass duty-free into France for three years, on the condition of founding crystal glass-works in France during the interval. This he did by buying the glass-house of Sainte Anne at Baccarat, where, up to that time, only common glass had been produced, and establishing crystal works which, under excellent administration, have become the most important establishment of the kind in France. —See G. Bontemps, *ut sup.*, p. 529.

The reason of the resemblance which the Baccarat glass bore to old English "flint" glass in M. d'Artigues' time was that, seeking in vain for white sand in the neighbourhood, he was finally obliged to content himself with certain hard, white, flinty pebbles then abounding in the bed of the river Meurthe hard by. These, being calcined, finely ground, and otherwise prepared, served his purpose admirably, until the handy supply becoming used up and difficult to procure, d'Artigues' successors had to fall back upon sand from Champagne.—G. Bontemps, *ut sup.*, p. 50.

X.—HOLLAND.

Concerning the history of glass-making in the Seven United Provinces of the Dutch Republic, now constituting the kingdom of the Netherlands, from the time of the first arrival of the Venetians and Altarists to the end of the eighteenth century, it is so bound up and interwoven with the story of the art in the Spanish or Austrian Low Countries during the same period that the account of the movement is, generally, the same for the one country as for the other. What, indeed, with regard to art of any kind in the Seventeen Provinces—save that which may be purely and narrowly local—is the accident of a boundary! And large as the materials are that have already been made available for the Low Countries, the whole history of a most remarkable artistic movement has not even yet been brought to light in Belgium; while, as regards the Northern Provinces there appears to be still a great deal to be learnt.

Holland was favoured more by Altarists than Venetians, and as early as in 1597 the Italians at Antwerp resented the competition of the Amsterdam glass-houses, as did also in 1607 the Venetians established so far off as at Cologne.[1] This implies Italians, or Altarists, working with considerable success at Amsterdam. There are strong reasons for believing that the glass manufacture "à la Vénitienne" was carried on at Amsterdam throughout the seventeenth century, but the absolute proof of documents are at present wanting. No doubt the character of the "output" was adapted later on to the changed taste, but with no diminution of energy, for a traveller—perhaps with somewhat of a traveller's literary licence—likens Amsterdam, in 1738, to classic Alexandria—"C'est une ville opulente, où tout abonde, où personne ne vit dans l'oisiveté: les uns y soufflent le verre . . ., telle était autrefois Alexandrie, telle est aujourd'hui Amsterdam."[2] Thus Amsterdam continued to make her own glass in addition to the facilities which she had after the Peace of Utrecht in 1713 for obtaining glasses of all countries from Middelburg or Antwerp. From this time sprang up in the great city on the Amstel the art of cutting and polishing glasses, which, being developed during the eighteenth century, brought it such deserved fame.

We have seen that a native of the Low Countries, Godefroid Verhaegen, set up glass-works "façon de Venise" at Middelburg in 1581. He came from England for this purpose, and in 1597 the glass-men at Antwerp complained not only of his competition, but also of the kidnapping, by the Middelburgers, of their workmen.[3] Half a century later all sorts of glasses were being made in this outlying, place where the Bohemian merchants later on, as has been shown,[4] had some of their large warehouses. In 1740 the furnaces were directed by an Englishman, as was a few years after the neighbouring glass-house of Flushing, all certainly then working "more anglicano."

The de Bonhommes first obtained and directed glass furnaces at Maestricht in 1651, which

[1] H. Schuermans, *ut sup.*, Lettre X., p. 595.

[2] De la Barre de Beaumarchais, *Le Hollandais*, p. 67. This is a plagiarism from Vopiscus in a letter which Hadrian wrote from Alexandria to the Consul Servius ". . . civitas opulenta, dives, foecunda, in qua nemo vivat otiosus . . . alii vitrum conflant, ab aliis charta confieitur . . . calices tibi allassontes versicolores transmissi, quos mihi sacerdos templi obtulit." The exact meaning intended by *calices allassontes* has been discussed.—See E. Garnier, *ut sup.*, p. 43.

[3] H. Schuermans, *ut sup.*, Lettre X., p. 605.

[4] See p. 41.

had already been some years at work. They were in close relation with the glass-houses belonging to the same family at Liège, and workmen were interchanged as convenience demanded. Under this management the furnaces continued active, and constantly assisted both by Altarists and Venetians up to the end of the seventeenth century when they ceased. No doubt, at Maestricht, as in other places in Holland and the Low Countries, artistic glass industry was annihilated by the rapid change in taste and the importations from other countries. In 1778 the widow of the diligent Zoude of Namur supplied glasses to Maestricht.

At s'Hertogenbosch (Bois-le-Duc) in 1657 a glass-house was established, again under the control of the de Bonhommes. A Venetian gentleman was specially engaged there by them in 1666 to make beer-glasses "à la façon d'Altare et Murano." A century later it is quoted by Zoude of Namur as making goblets and wine-glasses. This was a considerable glass-producing place until the end of the century, when it was disabled by foreign competition. An interesting feature of the s'Hertogenbosch manufacture was that, being much pampered and fostered by the civic authorities, they gave during the latter half of the seventeenth century, as presents to persons of distinction who had deserved well of the town, cases of home-made glasses instead of gifts of wine as in former times. A series of covered cups, porringers, sweetmeat vessels, etc., engraved with armorial bearings, is still preserved at s'Hertogenbosch—examples of the simple generosity of the town in bygone days.[1]

In 1609 and 1619 certain glass-makers of Dordrecht had business relations with the glass-makers of Nevers. At Haarlem coloured glass was being made in 1667, white and coloured at the Hague in 1668, and there is no doubt that glass-furnaces existed at Rotterdam from the fifteenth to the end of the seventeenth century, as is shown by Gerspach. The same authority mentions Sybert Meynertsz van Duyn and Hugo Spierings as having been privileged in Holland in 1665 to make Rhine wine-glasses called "rheumers," and beer-glasses.[2] This is an important statement, as bearing upon the fact of the German influence in Dutch glasses from the beginning of the century, corroborated by the number of "rheumers" or "roemers"—which have nothing to do with the vulgar English rummers of a hundred and fifty years later—still existing in Holland and represented during a century in so many Dutch pictures, more frequently than any other glasses. The de Bonhommes, also, in the second half of the seventeenth century, employed Germans at Liège to make "remeurs verdes" and a fairly early instance of a roemer, doubtless made at Liège, is quoted by M. Houdoy[3] from an inventory of 1570—"Un rumer vert encassé en ung pied d'argent doré et couvercle de meisme, armoyé des armes de la dame de Buren."

XI.—THE SEVENTEEN PROVINCES.

Having now seen something of the course of glass-making generally in the Seventeen Provinces, and particularly of the works of Venetians and Altarists in those parts of Europe

[1] H. Schuermans, *ut sup.*, Lettre X., p. 592. [2] Gerspach, *L'art de la verrerie*, p. 287. [3] Houdoy, *ut sup.*, p. 27.

during close upon a century and a half, it may be allowed, without much reservation or compunction, that with a very few obvious exceptions of glasses imported from Venice, all the artistic glasses "façon de Venise," and diamond-etched with Dutch or Flemish portraits, subjects, arms, or various devices, were both made in the Low Countries and there decorated; in fact, to come to any other conclusion in this regard would be almost impossible in the face of the documentary testimonies—the "pièces justificatives"—that have, within the last fifteen years, been placed within the reach of inquirers.[1] As to undecorated glasses, while presumptive evidence naturally leads to the same conclusion, the difficulty of positive attribution yet remains, and sympathy will not be withheld from the connoisseurs of to-day who find themselves, after two hundred and eighty-nine years, in much the same position as the petitioners of 1607 who then declared that Venice glasses were counterfeited so accurately in the Low Countries "qu'à grand peine les maitres eux-mêmes sauraient juger la différence." Nevertheless, a separation of nearly three centuries from the facts has not discouraged Belgian and Dutch specialists from the endeavour to determine that which almost baffled contemporary experts, and not alone the origin, but the exact local sources of the graceful artistic glasses which are so conspicuous in the art history of their countries. For instance, if the difference between Venice glasses and those of Altare could be accurately recognised, then Italian glasses made at Antwerp, where Venetians worked, could be distinguished from those of Liège, where Altarists practised.[2] Important initiatives of information to this end—at present not available for reference—are original working drawings or outlines, veritable "pièces de conviction." Some, for example, are known to remain among the archives of the de Bonhomme family; others are believed still to be in the possession of the successors of the Nizets, referring, no doubt, to the glass-works of Antwerp and Brussels. In this respect England has been, in a way, more fortunate.[3]

The value of pictures in giving information respecting the dates and forms of glasses, their relative value and application to use in all grades of society, has not been overlooked by Low Country antiquaries. In these exact and beautiful pictorial records, which no other country possesses to such an extent, the wide influence of the Italians upon native art in glass is so clearly set forth, that, in order fully to illustrate the ancient industry in the National Exhibition of 1880, the Belgian Minister of the Interior commissioned M. J. van Mansfeld to make drawings of all the glass vessels represented in pictures

[1] "Of the manufactory (*sic*) of glass in Flanders and Holland little seems to be known."—Nesbitt, Introd., *Slade Cat.* p. xlviii. "The greater number of the specimens under this head were probably manufactured in Venice for the Flemish and Dutch markets, and decorated in those countries."—*Slade Cat.*, p. 152, Sec. VIII., Flemish and Dutch Glasses, 1871. In the Introductory Notice to the Catalogue of Glass Vessels in the South Kensington Museum (1878), Mr. Nesbitt had the advantage of the information resulting from M. Houdoy's first researches into the subject (see p. 36).

[2] No. 493 of the Slade Collection is an Italian roemer with a gilt incurved rim. The stem or base is decorated with three sets of double vertical rows of bosses with pale blue centres, the sets being divided from each other by gilt satyric masks. Whether this glass was made in Venice itself, quite independently of German influence, or in the Low Countries, by a Venetian or an Altarist who carried his Italian mask stamp with him, and toned the form of his glass by the vessels he saw around him, or fashioned by an Italian who had returned to "Rialto" after working in the Low Countries, would be a nice question to decide.

[3] "Papers relating to the Glass-sellers, 1667-72, Sloane MS. 857," Appendix, No. XXIX. Of a later time, in the *Flambeau Astronomique*, or Calendar for the year 1725, in an advertisement of the glass-house of Saint-Paul-lez-Rouen, at Eauplet, the public is informed that "les personnes curieuses pourront, en leur présence, faire mettre à exécution leurs dessins, tels qu'ils puissent être," etc., a long list being given of the different objects that are produced in glass, both for the table and for the requirements of the church.—H. Schuermans, *ut sup.*, Lettre VI., p. 266.

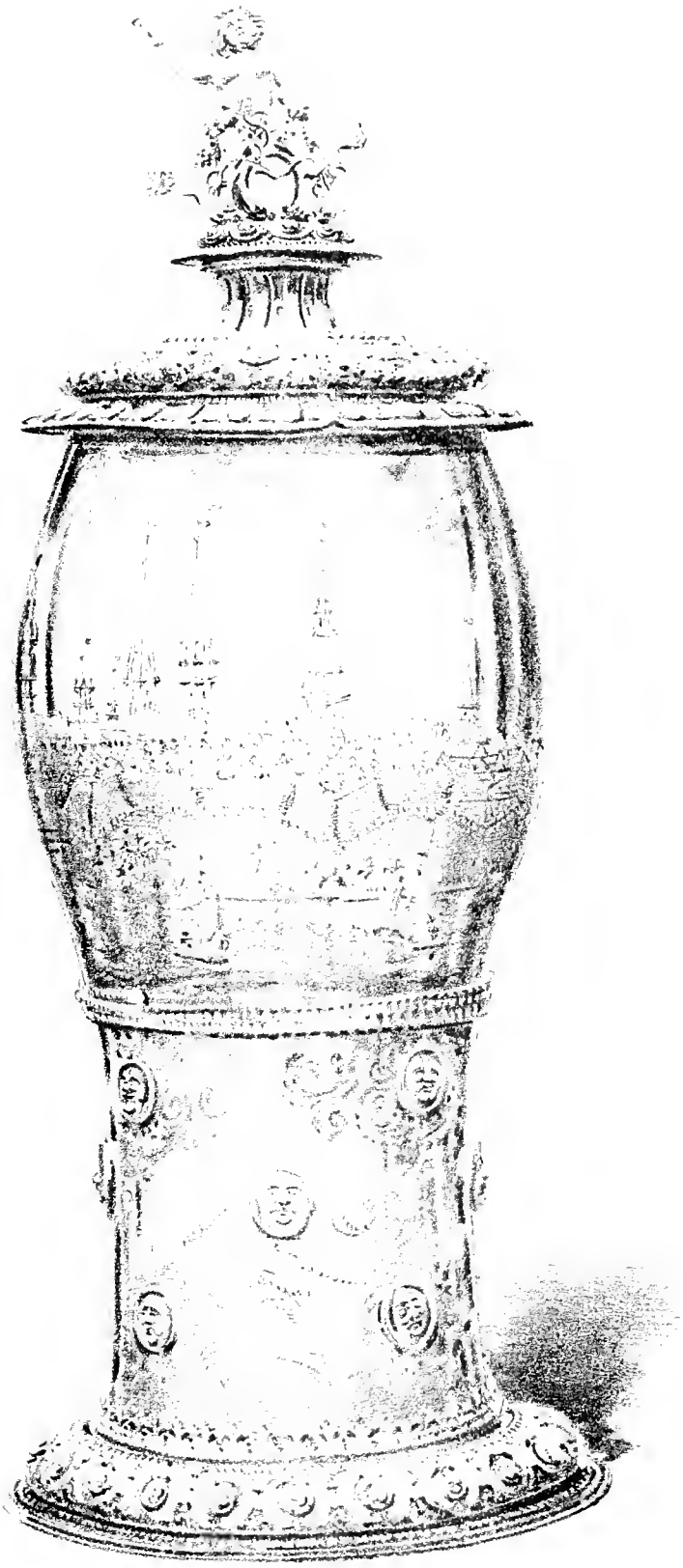
in public collections throughout the Provinces.[1] These drawings were finally deposited in the Bibliothèque du Musée d'Antiquités at Brussels. They form a valuable series of evidence, which it may be hoped will ere long be supplemented and made complete by drawings from Flemish and Dutch pictures in the numerous galleries near or far from Holland and Belgium, where genuine examples of these very original and human schools are so justly prized. The great interest of representations of glass in pictures consists in their showing not only the purely Venetian forms—the glasses *de luxe*—made in the Low Countries by Venetians and Altarists as long as they were prominent there, or rather, until the last quarter of the seventeenth century, and by their imitators, but also the glass cups of late Gothic times—cups mounted in gold with mullet-footed bases, lingering on the buffets in the pictures side by side with the simple thin glass drinking-vessels, of which—as with the late fifteenth-century Igels, and the early Krautstrunks—original examples are so excessively rare, and which preceded the first productions of the foreigners in the Low Countries. Then we have also in the pictures, up to the end of the seventeenth century, the likenesses of the spacious wine and beer glasses, both of the better and of the common sort, and so faithfully depicted that if actual examples had not happily been preserved, the continuous story could have been set forth from the not less fascinating pictures alone. Now the sources unite in showing exactly how Italian influence, exercised under sunnier skies, for the most part upon delicate tazza-shaped cups and wine-glasses of moderate dimensions, crept into the designs of the capacious vessels which the ruder tastes and more vigorous habits of the Flemings and the Batavians demanded.

Glasses in the Seventeen Provinces, from the middle of the fifteenth to the end of the eighteenth century, may be conveniently divided into three principal groups: (I.) Those that are anterior to the coming of the Italians; (II.) those that were made during the stay and operation of the Italians; and (III.) those that belong to the time when Italian influence had passed away.

GROUP I.

As regards the glasses in Group I., the representations in pictures and the few actually remaining examples show us exactly what they were like, namely, small thin cups or tumblers, crudely shaped—like the food or drinking-vessels of pottery, the so-called "incense" cups, from primeval graves—plain, or delicately fluted in various directions, the glasses being white or rather horn-colour, and dark blue, and their only further ornamentation being a plain or cable band, or a denticulation forming a foot at the base (Figs. 39-54). Others following these in date have short bases formed by the simple process of constricting cylindrical glasses taller

[1] The late M. Houdoy began some years ago to collect sketches of examples of glasses represented in Flemish and Dutch pictures, with the view of determining their periods. He said: "Pour établir la série de ces transformations successives des formes primitives, il faudrait, dans une suite de dessins, relever chez tous les peintres des écoles des Pays-Bas, et en suivant l'ordre chronologique, d'après la date des tableaux, toutes les verreries représentées; on aurait ainsi l'histoire graphique des produits des usines du pays, ce qui permettrait de classer méthodiquement les échantillons encore nombreux qui ont survécu." The same idea occurred independently in 1887 to the present writer, who, encouraged by the suggestions of a valued Dutch friend, now, alas! removed, and with views precisely similar to those of M. Houdoy, visited the principal galleries and museums in the Low Countries and made several hundred sketches of glasses from pictures, and from the actual objects, with dimensions, preserved in the museums, and in some private collections, for the purpose of the present work.



8.—GERMAN GLASS.

than those just alluded to. Cups of precisely similar forms in turned wood, plain or harnessed in pewter, are shown in pictures of the time, leaving little doubt as to the origin of the shapes of native-made glasses in the Low Countries in Group I. To this period must also be assigned a few rare dark green or brown glasses, with or without the single handle, and decorated with flat strawberries or compound "prunts"; it is probable that these cups were made in Cologne; they remain a class apart and will be spoken of later on.

GROUP II.

With regard to the glasses in Group II.—those that were made during the stay and operation of the Italians,—at the beginning of the sixteenth century a certain late fifteenth-century glass called an Igel (Fig. 60), which lengthened later into the Krautstrunk (Fig. 61),[1] arrived in the Low Countries from the Rhine-land, precursor of a long and varied line of glasses which flourishes more vigorously than ever at the present day in the country of its origin. The

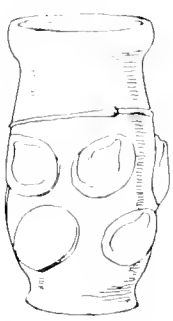


FIG. 60. (One quarter.)

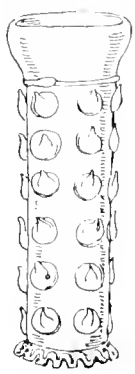


FIG. 61. (One quarter.)

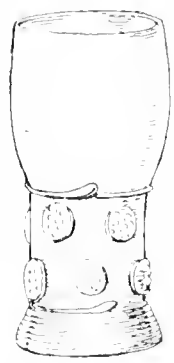


FIG. 62. (One quarter.)

FIG. 63. (One quarter.)

mediaeval Igel expanded into the Roener (Fig. 62), and this, in its settled and normal form, quickly became the most popular and picturesque glass which has perhaps ever been devised; to use an expressive modern vulgarism, it "stands on its record."

We have seen that Germans were making roemers in the Low Countries before the middle of the seventeenth century, and there also the quaint vessel had a long course, being the glass *par excellence*, with its delicate shades of blue, yellow, or green, that the painters never tired of painting, whether as roemers simple, or in their more ample shape as Berkemeyers[2] (Fig. 63), and such as Lady Harvey's great glass (Plate 8). These were the

[1] Krautstrunk, *i.e.* a leafless cabbage *or* kohlstalk, is the name, now seldom used, originally given to the old German, tall, cylindrical drinking-vessels with expanded mouths, closely studded with bosses or "prunts" on the sides, and with plain or denticulated bases. The usual form of a Krautstrunk is a tall, slim-bodied glass, as the name implies, the prunts being constant features.

[2] The original berkemeyer was a covered cup turned out of a length of a thick branch of a birch tree, the bark being left on as an ornament. Following the classical practice of bees'-waxing the insides of beechen cups, the berkemeyers were similarly lined with pine resin, in which various spices were embedded to impart a flavour to the wine. It appears that in Holland at the present day glasses of varieties of the roemer form, whether large or small, are all properly called roemers, the name berkemeyer being also used, but only to indicate the larger vessels. The latter are described in "Nederlands Displegtigheden vertoonende De plegtige gebruiken aan den dis in het houden van Maaltijden en het drinken der gesondheden onder de oude Batavieren," etc., by Philippus Losel, 1732. Dutch dinner ceremonies, showing the observances at dinners and at health-drinkings as carried out by the old Batavians, etc. Perhaps the finest berkemeyer in existence is the monumental example in pale green glass, in the possession of Magdalen, Lady Harvey. This, with its silver cover and base, is exactly 2 feet high, the berkemeyer itself measuring 1 foot $5\frac{3}{8}$ inches. Round the cup is an engraved representation of the city of Hamburg; over the land side it is daytime, with the sun "in splendour"; over

glasses which the accomplished sisters Anna and Maria Tesselschade Roemer Visscher, and the learned Anna Maria van Schurman, decorated with their exquisite diamond-point engravings.

Anna, Gertrude, and Maria Tesselschade were the three daughters of Roemer Visscher (1547-1626), a wealthy merchant of Amsterdam, and an excellent poet. He formed a literary and artistic circle at Muiden, near Amsterdam, to which the great poet Vondel, and Hooft, the historian and purifier of the language, belonged, and which had important results in developing literature and the arts in Holland in the early part of the seventeenth century. Another similar centre was constituted at the same time at Middelburg, in Zelande, of which Cats was the moving spirit. When he went to live at Dordrecht, that town became a focus of literary society. In this relation the names of Huygens, Grotius, Barlaens, and Spiegel also occur to the mind; but we are concerned now chiefly with the ladies of the Visscher family.

A contemporary writer, speaking of their varied literary and artistic accomplishments, adds that they excel in needlework and dancing, are finished musicians, write poetry, engrave glass with the diamond, and can all swim. In the Rijks Museum at Amsterdam is a beautiful pale sea-green glass, $5\frac{1}{5}$ inches high, exquisitely engraved by the author of the *Amstelstroom*—Anna Roemer Visscher (1581-1651). On one side is a wild rose, a carnation, and a marigold, and on the other, this inscription—

Bella Dori gentil. Noi vaghi fiore
Da le prendiam gli honori,

with a great dragon-fly above, and a *conus imperialis* below; on the stem is her name, and the date 1621 (Plate 9). A pale green glass, a berkemeyer, $6\frac{1}{4}$ inches high, is inscribed by Anna in a free flowing hand, ornamented with intricate scrolls, after a peculiar Dutch manner—*Vincens tui;* this is signed and dated 1646 (Plate 10). When Cats was inaugurated Pensionary of Dordrecht, Anna sent him a glass inscribed by herself: *Sit cum Felino felicitas Senatui pax Populo Dordrechtano Anno* 1623. Of Gertrude Roemer Visscher's works on glass little is known.

Maria Tesselschade (1594-1649) was so named in consequence of the death of her mother at her birth, and to mark the loss, three months before that incident, of a large part of her father's merchant fleet near the island of Tessel or Texel in a great storm. From the hand of this beautiful and accomplished woman, the friend of Hooft and Vondel, is at Amsterdam a pale green roemer, $6\frac{1}{4}$ inches high, with the inscription—

A Demain les Affaires.

This is also ornamented with flourishes, and dated 1646 (Plate 11). It was specially engraved for Hooft, together with four others.

the water and the shipping it is night, with the half moon "illuminated," and numbers of gilt stars. The whole picture is engraved on the wheel, the clouds and some details being polished. On the stem twelve sea monsters and mermaids are shown in three rows; their heads are all alike and stamped in relief on prunts, the bodies belonging to the two lower, and the foliage surrounding the four heads in the upper set being skilfully arranged to fill the field, and excellently engraved. The base of the glass and the cover are of silver gilt in rich Renaissance work, with the hall mark of Hamburg and of a maker in that city, but the whole is surmounted by a vulgar Bacchus astride upon a barrel. Between this sumptuous "verre de parade" and the smallest roemer that has been noticed by the writer—namely, one $2\frac{1}{2}$ inches high in the Rijks Museum at Amsterdam—there is a wide distinction. The date of Lady Harvey's glass is just after the middle of the seventeenth century. The expanded roemer, which, for convenience, we also call a berkemeyer, was much favoured by Franz Hals, as may be seen in the pictures of extraordinary breadth and power by that master at Haarlem.

9.- DUTCH GLASS.

10.—DUTCH GLASS.

11.—DUTCH GLASS.

In the art of diamond-point engraving upon glass to which the learned poet and linguist Anna Maria van Schurman (1607-1678) humbled her genius, she excelled even the productions of the sisters Visscher, as she also surpassed them in her very high mental qualities. A good example of her skill is preserved at Amsterdam on a tall cylindrical dark green glass, $8\frac{1}{4}$ inches high, which was filled with the wine of honour and presented by Viglius van Zuychem to Charles-Quint, on the occasion of his state entry into Utrecht. Anna Maria ornamented this glass with figures, the date 1646, and the following distich :—

"Als schijn ik duister,
De naem geeft luyster."

Painters-etchers of repute also bent themselves to the adornment of roemers with portraits of contemporary celebrities, and their armorial bearings, while minor artists decorated them with views of towns, and country seats,—"Lusts"—or with the coats of princes and Stadhouders, and the always popular arms of the Seventeen or the Seven Provinces. Mr. Mainwaring has a capital example. Many are admirably pencilled in gold or grisaille, and with artistic results all that could be desired.[1] The manipulation also of these delicately-tinted glasses in the early part of the seventeenth century is worthy of all praise; it is, however, impossible for a casual observer like the present writer to point out the minute particularities that might indicate Dutch-made from German roemers, or berkemeyers—perhaps for any one to trace with certainty the hand of an Italian upon a vessel of which the form is, surely, totally free of Italian origin, whatever some of the details may occasionally seem to indicate. It must be sufficient here to call attention, with regard to these details, to the accurate judgment as to the exact amount of metal necessary, and the peculiar dexterity with which the large smooth applied blots or prunts of glass cover the stems of the berkemeyers and roemers without encroaching upon one another, and give in their slightly varied shapes the delicate play of light and shade unattainable in any other way, making it no cause for wonder that the painters loved them; to signalise the swift movement of the workman, who, travelling from point to point with unerring skill as he decorated the stem, from time to time connected the blots, "prunts," "noppen," or "doornstokje" with a slender trail of glass (Fig. 64); and to show in those other examples in which the "thorn," caused by the quick withdrawal of the hand, and generally left erect, is sometimes

Fig. 64. (One third.)

[1] Mr. C. F. K. Mainwaring's glass is a pale green roemer of the finest quality, engraved with the diamond point, with the arms of the Seven United Provinces, surmounted by crowns, and respectively subscribed: Geldria, Hollandia, Zelandia, Vtrecht, Frisia, Transysulana (*i.e.* Overyssel, the land beyond the river Yssel, styled by Mercator, *Belgii inferioris Geographicae tabulae, Daysburgi editae* 1585—"Dland van over Yssel"), and Groninge. A larger shield, also crowned, bears the following arms:—quarterly, (1) Nassau, (2) Catzenellenbogen, (3) Vianden, (4) Dietz; on an inescutcheon of pretence—quarterly, (1) and (4) Châlons, (2) and (3) Orange; on an inescutcheon-in-chief the coat of Veere, and on one in base that of Buren. These are the arms of Frederic Henry, Prince of Nassau and Orange, who died in 1647, son of the great William the Silent, and half-brother and successor, as Stadhouder of the United Provinces, of the celebrated Maurice of Nassau. A precious glass, $6\frac{3}{4}$ inches high, of much the same shape and colour, is in the Rijks Museum at Amsterdam; on one side is the portrait of Prince Maurice, a pair of clasped hands below, and on the other is a view of Dordrecht on a cartouche held by two angels; below is a butterfly and an eagle, the whole being engraved with the diamond. Another very choice pale green roemer, 9 inches high, in the same collection, is decorated in gold with the arms of Maurice of Nassau, a tree, the motto of the Prince—*Tandem fit surculus arbor*—and the date 1606.

folded with a half-turn upon the basis out of which it is drawn, or, in other cases, rapidly impressed by the assisting "gamin" with a human face, a strawberry, a blackberry, or a mask. The delicate stringings, or wheeled quillings, also, round the necks of the roemers and berkemeyers are not less noteworthy than the stringings or spinnings—naturally never quilled—of their bases or footings. These feet, in the earlier glasses, were comprised only of denticulated rims, as in the coeval, but limited and short-lived, survivals of the crude or delicately fluted early sixteenth-century cups, and which the roemers finally swallowed up. Nor will the connoisseur overlook the minute bubbles in the metal—never approaching to "mossiness," the striations, and the unforced artistic irregularities which distinguish these choice old glasses, upon which age has as yet barely had an effect, from the cold soulless formality and the glistering rigid perfections of modern imitations.[1] The dimensions of roemers vary between $17\frac{3}{8}$ and $2\frac{1}{2}$ inches high. They will be spoken of more fully under Germany.

Allusion should be made to the Dutch "beaker-screws," *bekerschroeven*, for which roemers of the finest kind were specially made with single-rimmed or very moderately stringed bases.[2] Five beautiful silver-gilt examples, all of the same design, are preserved in the Rijks Museum at Amsterdam of the early part of the seventeenth century (Plate 12). In a picture by D. Teniers (1610-1690), in the Musée Royal at Brussels, a great gold beaker stand supports a sky-blue berkemeyer, and a picture in the same collection by an unknown hand, dated 1621, exhibits a dark blue roemer upon an elaborately chased gold stand carried by a black servant. In the great picture by van der Helst, "Het Schuttersmaaltijd," described by Sir Joshua in 1781 as "the first picture of portraits in the world," an aged man in black satin holds a roemer on its elaborate gold beaker-screw and proffers a toast to William the Drummer.[3] Simpler stands are seen in pictures by C. de Heem.[4] The method of fastening a roemer on its mount is by the ingenious working of a rod passing through the centre of the stand, and acting by a thumb-piece at the lower end, through screws fixed within at two points, upon certain pivoted ornamental details at the top, which expand and close at will, and release or clip the base of the glass.

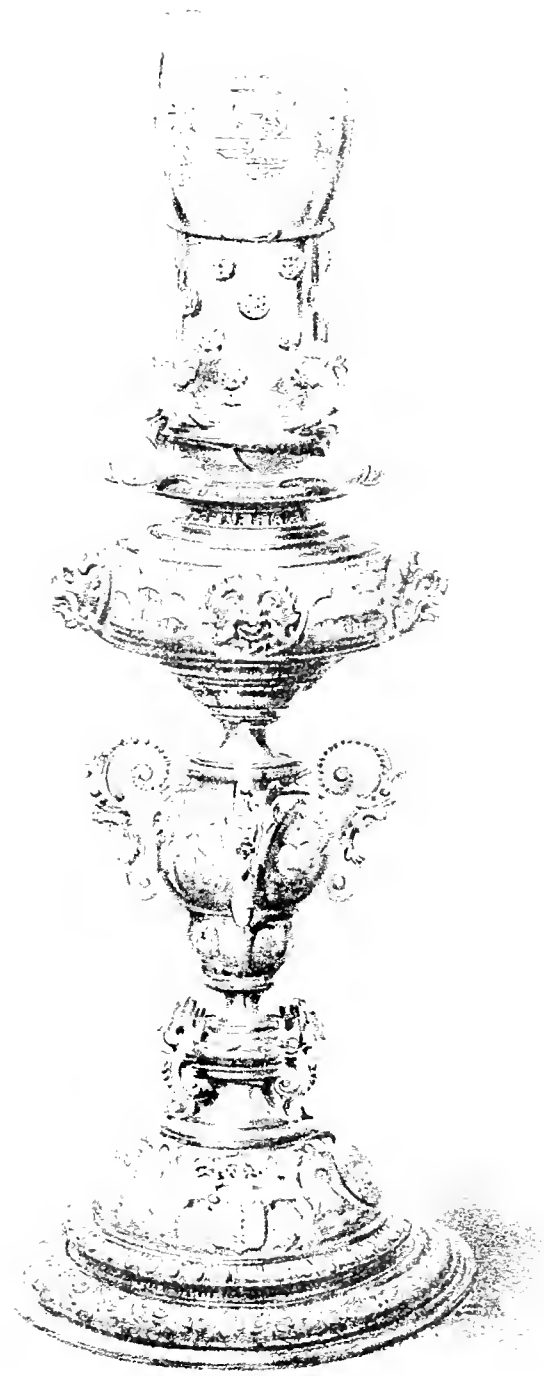
The Italian influence affected but slightly the development of the early German and the Low Country-made roemers, though it certainly set its mark upon the collateral and short-lived *évasés* cups decorated with masks, the direct successors of the ancient crude and small native-made glasses. This is apparent in the few examples which have been preserved of the thin early cups, the first that were improved in form by the Italians, with widened mouths—*évasés*—and decorated with narrow quilled strings, lions' faces, masks, and prunts, and as seen in pictures of the early part of the seventeenth century (Figs. 65, 66, 67).

[1] The author takes this opportunity of acknowledging the obliging co-operation of Herr Oskar Rauter, Director of the Rheinische Glashütten-Actien-Gesellschaft at Ehrenfeld, near Cologne, and of Messrs. H. J. and J. C. Powell of the Whitefriars' Glass Works, London, in which establishments both antique, ancient, and old glasses have been reproduced with great technical skill.

[2] The shallow stringed or spun bases of many of the roemers of the early part of the seventeenth century were evidently brought about, and apparently long influenced by the use of the bekerschroeven; the attachment was naturally firmer and easier than with deep-footed glasses.

[3] "This is perhaps the first picture of portraits in the world, comprehending more of those qualities which make a perfect portrait than any other I have ever seen."—"A Journey to Flanders and Holland in the year 1781," *Literary Works of Sir Joshua Reynolds*, vol. ii. p. 197, edit. 1852.

[4] An excellent picture by this master, in the possession of Mr. J. R. Boyall, shows the roemer held in its open-work silver stand by three recurved griffins.



12.—BEKERSCHROEVE.

It should be remembered that the Old Masters were collectors of classical antiquities, and objects of art near to and of their own times, for use when necessary in their canvases, just as modern painters are at the present day; the date of a picture after about 1620 is

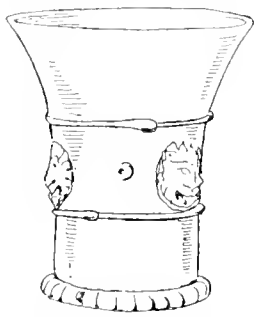


FIG. 65. (One quarter.)

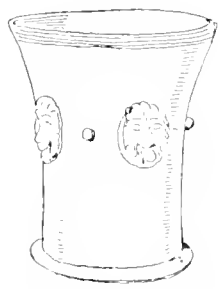


FIG. 66. (One quarter.)

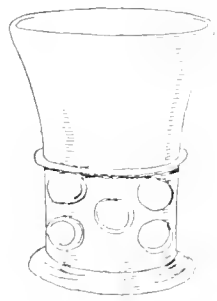


FIG. 67. (One quarter.)

not therefore necessarily that of the glass portrayed in it. Such evidence has consequently to be used with discretion. Rubens, of course, was a collector,[1] and so was Rembrandt, in the catalogue of whose effects we find in the "Room of the Arts," "quelques petits vases rares et verres de Venise." These formed part of the assemblage of art objects which Rembrandt's good taste had amassed, the cost of which was one of the causes of the bankruptcy of the great painter. He was not the friend of princes, and it is a melancholy fact that so great a genius should have passed the last years of his life in poverty, and in discouragement worse than death.

But the simple early glasses soon passed away, and in their places, side by side with the roemers in their first stages, came the fine-quilled, stringed, and free-ringed cups, "verres à anneaux," which under Italian influence grew out of the small and simple glasses (Figs. 68, 69, 70). Their colours are ruddy brown, pale blue, pale sea-green, dull red, and dark

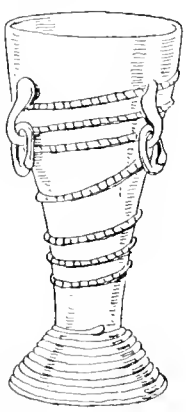


FIG. 68. (One third.)

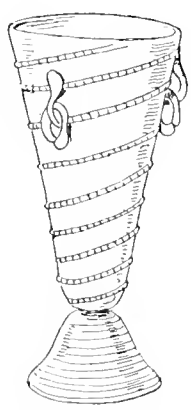


FIG. 69. (One quarter.)

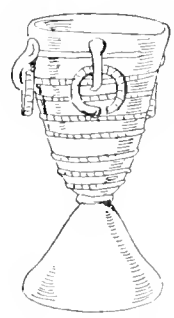


FIG. 70. (One third.)

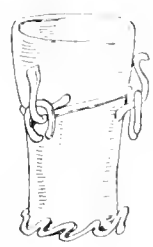


FIG. 71. (One quarter.)

gold. As with the birthplace of Homer, several cities desire the honour of the origin of these curious vessels: Brussels, Liège, Nevers, Cologne—the latter place is the most likely source. It is to be noticed that in seven examples from widely separated collections every

[1] In the beautiful house, Hilwerne, which he built at Antwerp soon after his return from Italy, a saloon was constructed for his collections. It is shown in section in one of the two engravings illustrating this building.—*Catalogue des Estampes gravées d'après P. P. Rubens*, par F. Basan, p. 230, edit. Paris, 1767, interleaved and annotated copy by Thomas Kerrich.

Mr. Nesbitt quotes a collection of "quatre cens beaux verres de Venise gentillisez des plus jolies gayetez que les verriers sçauroient inventer," collected by the Treasurer of the kings of France, Robertez, between 1504 and 1532. It is one of the oldest collections of the kind of which a catalogue exists.—See *S. K. Cat.*, p. clix.

one has the stringings quilled or wheeled on the cup, and plain or spun on the base. Such are the invariable details of the old roemers, whose bases are thus spun on or built up. In modern times the base has grown up at the expense of the stem, and is made in the usual way with stringings spun over it to simulate the old artistic work. A few early Low Country tumblers were also ringed (Fig. 71).

Of special interest are the great Antwerp-made glasses, with covers, of the middle of the seventeenth century, with enamelled decorations and arms of cities; their forms are accidentally allied to those of some of the German "Humpen."

Continuously collateral with the early native-made glasses, with the roemers, the berkemeyers, and the other glass cups that have been spoken of, were the "verres façon de Venise" which were made throughout the Low Countries, and of which so many seventeenth-century examples exist in collections, and are also so fully represented both by real Italian masterpieces and in the pictures. Doubtless familiarity with these imparted an elegance, which they would not otherwise have acquired under native hands, to other well-known Low Country glasses: the tall flûtes tapering to a bulb just above the foot, "toujours souvient à Robin de ses flûtes," the short or lengthy molenbekers (Figs. 72, 73), made both in glass and silver, the glass bells or tocsins, "Hansje in de Kelder," the boots, horns, bucks, and other attributes of boisterous or coarse merry-making. Obviously these frail drinking-vessels did not lend themselves with readiness to decoration in enamel; the diamond etcher, the gilder, and the light grisaille painter alone could operate successfully upon them.[1]

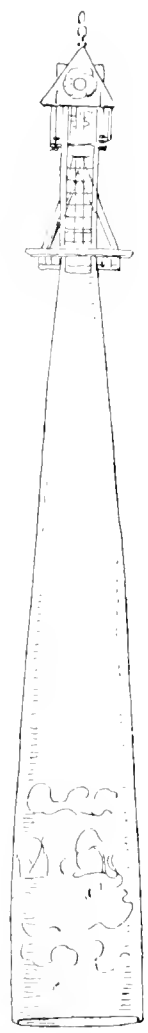


Fig. 72.

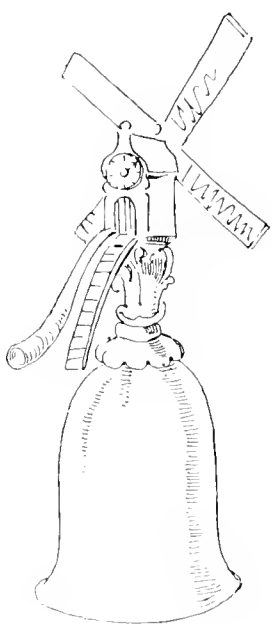


Fig. 73.

Besides these, which we have always with us throughout the seventeenth century in the Low Countries, and more particularly in the Seven United Provinces, are also to be recorded the turbinated or barrel-shaped glasses, alike German in origin, and blotted with "prunts" (Figs. 74, 75, 76); and running down through the same period, and alongside of the varied multitude of artistic vessels, were the toilet dishes, the "Schmuckschälchen" of Germany, the massive and graceless mead-cups (Figs. 77, 78, 79), beer, and posset-pots of

[1] The molenbekers were made both short and long. To the silver mill at the lower end of the glass a pipe was attached; by blowing through it, after the glass was filled, the sails were set in motion and a hand marked up to 12 upon a dial. The orthodox proceeding was to empty the glass as many times as the hand indicated on the dial when the sails stopped—doubtless a very popular game. But persons who flinched, and were not disposed to run the risk of twelve glasses "deep as the rolling Zuyder Zee," were suffered to compound by emptying the beaker once before the sails stopped, also a thing not easy to do, but less hazardous. In spite of their peculiar service, which must have led, as with the English Yard-of-Ale glasses, to much roughness and many breakages, a number of these remarkable vessels still exist. In the Rijks Museum at Amsterdam, together with many tocsins and mill glasses of glass and silver, is a molenbeker, with a mill of early construction fixed to the end of a long "fluit" glass which is engraved with the arms of Maurice of Nassau, and the dates 1585 and 1595. Special customs were

raw greens and blues, doubtless chiefly for tavern and common household use, and thick flat-sided cordial water bottles, or flasks, owing their preservation apparently as much to their solidity as on account of their decorations with names of owners, popular Dutch

FIG. 74. (One quarter.)

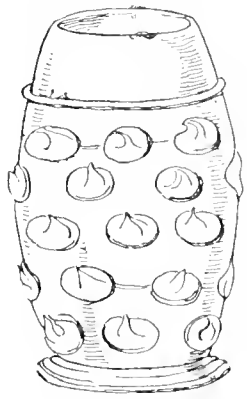


FIG. 75. (One quarter.)

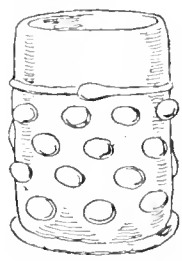


FIG. 76. (One quarter.)

FIG. 77. (One quarter.)

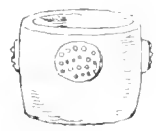


FIG. 78. (One quarter.)

FIG. 79. (One quarter.)

or Flemish truisms, and marvellously mazy scrolls. Such, with the exception of the scrolled glasses, were the cups of low life, represented in the pictures by the disorderly Brouwer of the tavern society which he loved, and in the faithful interpretations of the homes of the people by the younger Teniers or the elder Nollekens.

GROUP III.

With regard to the glasses in Group III.—those belonging to the time when Italian influence had passed away—the irruption into the Low Countries of English, Bohemian, French, and German glasses, though it struck a heavy blow against native manufacture, it did not crush it, and at once wipe out all trace of art glass of the older kind. With German glasses, indeed, the Republic and the Provinces had long been familiar; but those were the glasses of the Rhineland—the roemers—which they imported and copied, particularly at Rotterdam, where a collection of roemers made in that city is preserved; and they held their ground through good and evil report, and appear to have continued to be made in the Low Countries up to the end of the eighteenth century, some of the latest exemplifying a curious transition between the old roemers and the "twisted stemmed" glasses (Fig. 80), others being clumsy, thick white glass roemers, appropriately enough degraded by crude engravings on the wheel, but a sad falling off from the "classic" treatment of the roemers of 150 years before.

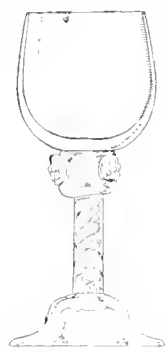


FIG. 80. (One third.)

also associated with the use on festal occasions in Holland of the tocsin, made both of silver and of glass, and of the great silver dice cups.

The story is told of a certain Frisian, Abbot Zardus, who forbade the monks in his convent to drink more than three cups of wine at dinner, one to the honour of each person of the Trinity. Being naturally annoyed at this restriction, they rose from the table without the customary grace. Boniface VIII. (1295-1303) was appealed to; he confirmed the abbot's injunction, but, in a moment of weakness, very foreign to his masterful character, he granted an additional cup to all the greedy regulars under the rule of Zardus who said their grace. Hence the saying—

"Een glasie na de gracie
Naar de les van Bonifaci."

(A glass after grace
By the law of Boniface.)

The "Hansje in de Kelder" glasses were those used to drink the health of newly married couples, a little figure making its appearance when the cup was emptied.

The flûtes certainly long stemmed the torrent of foreign importations. Fashions change, but customs—especially those of a convivial kind—die hard. In the heavier flint glass, in diminished lengths and plainer forms, neither vertically channelled or diamond etched by artists, the flûtes rapidly degenerated into plain tubes drawn out and tapering slowly from the top to the base, and without the intervention of a bulb, or, as it was called in England, a button at the bottom of the bowl, which gave so much character to the tall seventeenth-century flûtes, "façon de Venise." The simple tubular forms, which reappeared some time after in England under a different aspect, led later on in the Low Countries to the tall and slender "straw-drawn" glasses with expanded funnel-shaped mouths, reminiscences of special Venice glasses, and they, in their turn again modified, shrank finally about the middle of the eighteenth century, collapsed, and dwindled into the plain drawn glasses of tavern and every-day service, still plentiful enough in England, where they were in use somewhat earlier, and common also in their day throughout the Low Countries, but much lighter in weight, and often with long "blows" in the stems instead of the air twists or the plain stems with "tears" in them of the English examples.

Very conspicuous among the successors—they cannot all be enumerated—of the thin artistic glasses in the Low Countries, and emanating for the most part from glass-houses in Holland, are the tall wine-glasses with moulded and uncut baluster stems, "pieds balustres," recalling those of the English tazza-shaped silver cups imitating certain Venetian glasses, either solid or lightened in their bulbs and knops with single or connected "tears," bubbles, or sets of beads (Figs. 81, 82). These are quite distinct in character from the intrusive vessels of Prussia and Silesia. First associated with these glasses in the Low Countries and in Holland was the practice of a new school of glass engravers and cutters and a new style deriving originally, as to the cutting, from Bohemia.[1] The art was carried by the Schwanhards from Prague to Nuremberg, where Henry Schwanhard is believed to have discovered, about the year 1670, the art of etching on glass through a film of wax, by the action of fluoric acid upon the lines or stippled parts bared by a steel point, as in copper-plate etching. The old practice of sketching upon glasses with the diamond was still being carried on in Holland, and particularly by van Heemskerk,—whose portrait was engraved by Blooteling, van Buil, Charlotte van Santen, Cornelia Kalff, and the artists of the monograms F. C. M. (the C combined with the F) and W. M., for that excellent artist W. Mooleyser.[2] As usual, the older style overruns the new, and many Dutchmen applied themselves with great success throughout the eighteenth century to glass-engraving and stippling by the means of fluoric acid, constantly emphasising their work with the diamond point, and so grafting the art which they applied to "flint glass"

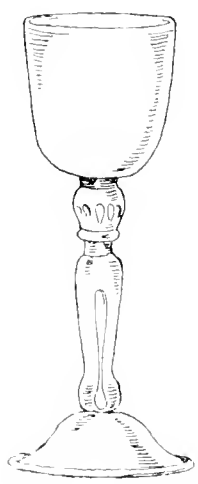


Fig. 81. (One quarter.)

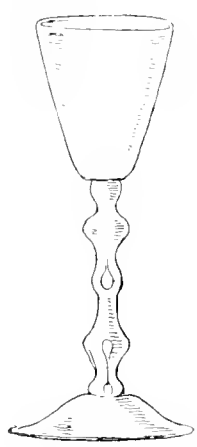


Fig. 82. (One quarter.)

[1] At Antwerp *gelaeschryvers* were inscribed in the Rolls of the Corporation of St. Luke.—H. Schuermans, Lettre V. p. 169.

[2] The author is indebted to M. A. M. Gareau, Vice-President of the Tribunal at Amsterdam, for the following unidentified initials, or in monogram form, with their dates, which he has met with upon Dutch glasses:—B. G., 1608; A. D., 1632 (or 1682); t.r., 1644; F. M., 1650; I.ss., 1657; A. M. S., about 1650.

upon that which was associated in the preceding century with the "verres façon de Venise." Foremost of these artists is Greenwood, whose admirable works, ranging between 1722 and 1743, are now very scarce. Among others must be mentioned Schouman, the portrait painter,[1] the two Hoolaarts, Fortuyn, Luyten, Vanden Blijk, van Lokhorst, Emaus, Ellinkhuysen, Sang,[2] and the famous Wolff, who has fortunately left a large number of glasses stippled in a manner that is quite unapproachable for their delicacy and beauty. Favouring the style of Watteau and Boucher, he applied his talents in various directions, including portraits, allegories, armorial bearings, figure subjects, etc., and often using the hard and brilliant English glasses with facetted stems, such as are seen in Sir Joshua's pictures,[3] for the display of his art. He had imitators.

In our own day the Melorts, father and son, practised the art of glass-stippling with some success up to the middle of the nineteenth century, and contemporary with them was Daniel Henriques de Castro, who worked excellently well after the manner of Wolff from 1833 to 1862. He died in the following year, and is appropriately recorded in these pages as the very last of the slender line of artists who worked at glass-engraving and stippling; many examples of glasses decorated by De Castro remain to evince his skill in the use of the diamond.[4] Thus we have during three hundred years a direct succession of artists, scanty in number, and working with the fewest possible tools in a manner quite peculiar and essentially appropriate—the most important point—to the material which they treated. This was an art which required at once delicacy of touch, firmness of hand, and distinctness of work, one more perhaps than any other in which the merest slip of the tool was irreparable, and fatal to success, recalling in this regard the far higher capacities of the artists who drew with a stylus, with unerring skill, the outlines and the muscles of the incomparable figures on the Greek vases.

The feet of all the semi-Gothic glasses and of some of those succeeding them, with which earlier traditions lingered, have their edges turned or folded over from below, forming a sharply-defined fillet round the upper edge, such as in an Early English stone base would

[1] A glass inscribed on the foot A. F. A. SCHÜMANN CANONICUS SANCTAE MARIAE SCULPSIT 1757, was exhibited in the Brussels Exhibition of 1881. He was a canon of Antwerp Cathedral.

[2] In the cabinet of the author is a glass finely engraved with the arms of William, Prince of Orange and Nassau, within the Garter. He was elected a Knight of The Most Noble Order when a child of four years old, 13th March 1752, and installed 5th June by his proxy, Sir Clement Dormer Cottrell. The letter of acceptance was signed by the prince's mother, "The Princesse Gouvernante." Under the foot of the glass is written with a diamond, *Jacob Sang Fec, Amsterdam*, 1765. A glass similarly decorated, in honour of the same prince, who assumed the office of Stadhouder in 1766, is in the possession of the Rev. J. A. Hewitt, Rector of Worcester, South Africa, to whom the author is indebted for information concerning many large cut and engraved glasses in the South African Museum at Cape Town. A betrothal glass engraved by Sang, inscribed as above, and dated 1760, is in the collection of Lord Torphichen.

[3] In the two pictures of the Dilettanti Society by Sir Joshua, 1779, many glasses are shown, all of the old "port" shape, which is very easy to empty. On the table is an ordinary black bottle with a silver label and chain, such as came into general use soon after for decanters. In Hogarth's series of Election pictures in the Soane Museum two black flasks have paper labels passed over their necks through holes torn in them. They are inscribed *Champaign* and *Burgundy*, and show the origin of silver decanter labels which were also made in Battersea enamel, generally decorated with cupids.

The service of plate provided for the use of the Princess Caroline at Kensington Palace, on her marriage with the Prince of Wales in 1795, included eighteen silver-gilt wine labels *en suite* with the ormoulu plateau, and fifteen silver ones.

[4] Mr. de Castro bequeathed several of his glasses to the Koninklijk Oudheidkundig Genootschap at Amsterdam. They are now on loan in the Rijks Museum. —*Een en ander over glasgravure* door D. Henriques de Castro, Oud Holland, 1880. In this interesting privately printed pamphlet the son of Daniel Henriques de Castro has brought together much information concerning an art which, from its delicate nature, had but few practitioners.

be described as a water-bearing moulding. This received the ends of the ribs of the bases, and was almost, so to speak, a structural necessity of the fifteenth-century cups. In later Venetian and "façon de Venise" glasses a fillet of a different kind constantly occurs, but chiefly in vessels of a larger size, for the purpose of giving more stability to the foot; this is always folded over from above, so that the fillet is on the under side; it was the origin of the welted or wide-folded feet so constantly met with in Low Country, German, and English stemmed glasses—the stengel-gläser of the Germans, as distinguished from the roemer, the pass-gläser, the wilkommbecher, etc., from the last quarter of the seventeenth to not much later than the end of the third quarter of the eighteenth century. It is a feature which is so far useful in defining in a general way a period in regard to glasses of these countries. Similarly the roughness in the centre of the bottom of a glass, where it was finally knocked off, or released from the *pontil* in the manufacture, was retained—with certain exceptions of highly finished cut and engraved Dutch glasses, and Bohemian glasses, not blown but cast in the rough in wooden moulds and finished on the wheel—until about the end of the eighteenth century, from which time the practice of smoothing and polishing the rough centres became general.[1]

Perhaps the earliest examples of folded-footed glasses of the latter kind that have been alluded to, and in the new material, are those with baluster stems.[2] A tall Venetian glass, stripped of its wings and ornamental accessories, gave the model for a Low Country baluster stem. Such glasses were not made in England until the end of the seventeenth century, and then in a smaller size, and they gradually degenerated. And belonging to the early years of the eighteenth century are the tall and sometimes narrow glasses with richly-cut thistle-shaped bowls, well engraved with arms, etc., faceted bulbous stems with "tears" in them, and folded feet. Some must be Silesian, but their strict attribution is difficult. The chief characteristics of these vessels are their rigid formality of cutting, and widely folded feet. Many of them appear to have come from England to be cut and engraved in Holland, probably in Amsterdam.[3] Closely allied to them are glasses of the same general form but sometimes

[1] The forefinger of the connoisseur passes involuntarily under the foot as soon as an old wine-glass is offered for his inspection, this being almost his only "touch" in both senses of the word, just as his brother collector of English plate—with so many more aids at once to facilitate his own researches and tempt the cupidity of the fraudulent, often indeed, happily, serving as pitfalls for the unwary deceiver—looks for the minute differences in the punches, for the touch of the leopard's head or the regular touch of Britannia.

[2] There are several engraved examples in the British Museum, two of them masterpieces by Greenwood. It is apparent that such glasses are heavy versions, partly necessitated by the new metal, of the light bulbous-stemmed glasses "façon de Venise" of the end of the seventeenth century. Later examples in this class, of the time of George I., have beaded bosses—answering to the knops of mediaeval chalices—in the stems, the beads being the precursors of the air twists. The almost solid early baluster stems recall those of a more refined character in silver of the tazza-shaped cups which, after enduring for little more than half a century, passed away with the outbreak of the Civil Wars; these, again, owed their form to delicate Venetian glasses.

[3] There are some excellent examples in the Musée Plantin at Antwerp, one engraved with three ships and inscribed 'T WEL VAAREN VAN DE VREYE SEE VART; another with a ploughing scene and inscribed T'LANDS VELVAAREN. If these are English glasses engraved in Flanders, as seems very probable, they have peculiar interest in illustrating the commercial relations as regards glass, between the Low Countries and England in the early part of the eighteenth century. Another goblet in the same museum, but of Flemish make, is engraved with a ship and inscribed DE NOBELLE ZEE VAART. A somewhat similar glass to the two first mentioned, but with a brown tint, and undoubtedly English, is in the cabinet of the author; it is engraved with the cypher and feathers of Frederick, Prince of Wales, so created 9th January 1729, when in his twenty-second year. Mr. J. R. Boyall has a good English example (Fig. 59), engraved in Holland, with the coat, surrounded by the Garter, and flanked by trophies of arms, of William, Charles, Henry, Frisco, Prince of Orange and Nassau, elected Knight of the Garter in 1733.

considerably thinner and lighter, in less brilliant metal, with high folded feet, approaching occasionally to the dome shape, and with long hollows or "blows" in the uncut or lightly flat-faceted stems. They would not bear the deep and elaborate work that was applied to English-made glass, and are usually only coarsely decorated on the wheel with hunting scenes, sailing ships, tavern subjects, military trophies, etc., and inscribed in Dutch or Flemish:—VIVAT DE PRINS VAN ORANIEN; VIVAT DE PRINS ONSE STAATHOUER; HET WEL VAREN VAN ONS VADERLAND; HET WEL WESEN VAN DE GODE VRIENDEN; T'LANDES WEL WAAREN; DE NOBELLE ZEE VAART; DE GODE VRYNT-SCHAP; DE GOEDE WELKOMST; DOET UW BEST, and such-like

FIG. 83. (One third.)

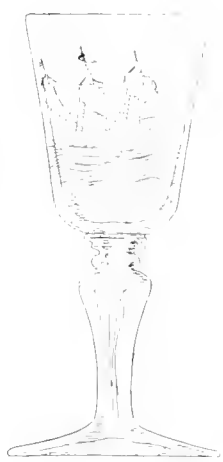


FIG. 84. (One third.)

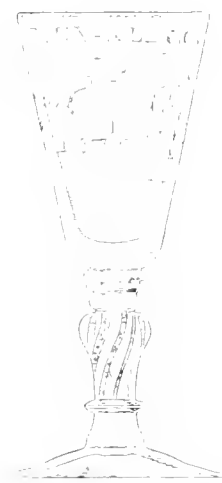


FIG. 85. (One third.)

FIG. 86. (One third.)

dedications. It was the period *par excellence* of the *wel vaaren* glasses. These are certainly types of the drinking-vessels which came into the Low Countries after the peace of Utrecht in 1713, from Prussia and Silesia, and were engraved in the Low Countries; their particular treatment and inferior quality of metal should readily serve to distinguish them from Low Country-made glasses of much the same shape and period in flint glass "à l'anglaise" (Figs. 83, 84, 85, 86).

Of purely Dutch origin and make, of the first half of the eighteenth century, are the short and bulky covered natal cups, or posset glasses. There is a refreshing simplicity in the engraved representations on these quaint vessels. The leech in his fur cap grasps the conventional Batavian foliage, while the rigid and angular nurse, seated far off in a high-backed chair, rocks the distant cradle by alternately twitching and slacking a string. The inscriptions run:—HET WEL VAEREN VAN DE KRAEM VRAUM EN HET KINTIE[1] (Fig. 87).

Arising out of the baluster-stemmed glasses with "tears" or beads in the stems, and immediately succeeding them, are those with the same shaped bowls and of which the upper or lower half of the stem is decorated with a series of hollow twists, formed by throwing out

[1] The same subject was also engraved upon baluster-stemmed glasses, thus taking the fashion back to the beginning of the eighteenth century; an example is preserved in the Museum at Boulogne. Mr. J. E. Hodgkin and Miss E. Hodgkin illustrate in their *Examples of Early English Pottery*, No. 208, a large four-handled posnet or tyg with a cover, dated 1692, and inscribed—

Here is the gest of the barly korne
Glad ham I the cild is born.

In the Lakenhalle at Leyden is a bocal of green glass, inscribed HYMENS BLEYDE BOODSCHAP, the happy message of Hymen; below is a cradle and the word OVERWINST—gain; a woman is also shown offering a glass to a man, with the inscription, VREUGDE TOT ERKENTENIS—joy to gratitude.

or prolonging and twisting the sets of beads already alluded to in the earlier glasses.[1] The process consisted in pricking a series of holes round a gathering of glass on the blowing-iron; by covering this with a second coating of glass, air bubbles are captured and enclosed, and these being drawn out to any distance and revolved, a twisted air stem—quadrillé—was produced, from which the standards of wine glasses were first in part built up, as in these transition glasses under notice, and afterwards wholly formed (Fig. 88). But such air-stemmed glasses appear to have been little made in the Low Countries in the early part of the eighteenth

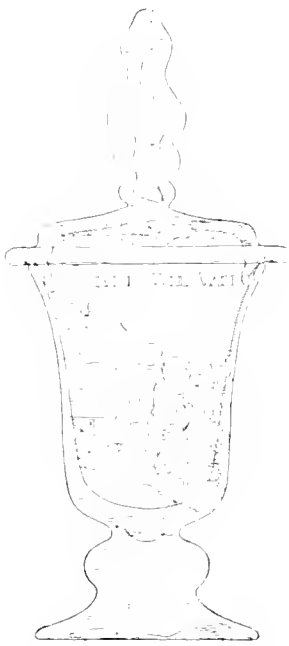


Fig. 87. (One third.)

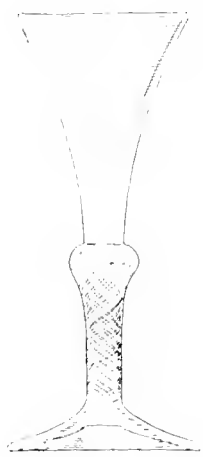


Fig. 88. (One third.)

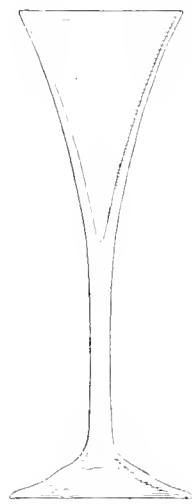


Fig. 89. (One third.)

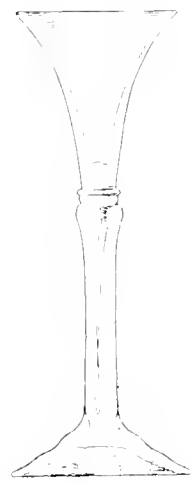


Fig. 90. (One third.)

century; circumstances, both commercial and political, as has been seen, were against them. The few air-stemmed glasses of the first half of the eighteenth century that are met with in the Low Countries have either high-shouldered stems upon which the funnel-shaped bowl is planted, or plain drawn air-stems. They rarely have folded feet, and are much lighter than the examples which were imported from England.[2]

The most distinctive glasses in the Low Countries from the end of the first quarter of the eighteenth century—treating the Principality and Bishoprick, as we have intimated, geographically—are those of Liège. To this city belong the tall descendants of the ancient

[1] See p. 54. The beaded stems, out of which the air twists were derived, continued to be made in Holland until the end of the third quarter of the eighteenth century. They were slowly driven out by the twisted standards, and the beads finally took refuge in the bottoms of the bowls of wine-glasses with white twisted stems. Such glasses were made with great success in Liège in, and just before the last quarter of the eighteenth century, the brilliancy of the metal, as well as its "ring," leaving nothing to be desired. Mr. R. H. Wood was fortunate enough to buy a set of two dozen at Hereford in 1877, with a double set of beads in the base of the bowls; they are probably of Liège make about 1770. A few inferior Dutch and good Liège examples are in the cabinet of the author. It is almost certain that such glasses were never made in England, but beads do appear at the lower end of the stems of certain rare wine glasses of the time of George I., and they may be seen in the knops of short champagne glasses, etc., a little later. Bubbles or beads were of course the sources from which were developed with such success in England, principally, perhaps, at Newcastle-on-Tyne, the air-twisted stems of different kinds which will be spoken of elsewhere.

[2] The Low Country flint or crystal glass was not of sufficiently high quality to allow of successful operation in this direction, save at Liège. Careful observation shows that the Dutch and Flemish air twists run irregularly and with uncertainty, while the ring of the metal and its lightness usually betrays its lower character. The earlier air-stemmed glasses may be distinguished by a certain disorder in the sizes and dispositions of the twists, the punctures having been irregularly done.

flûtes, many of them of very graceful shapes (Fig. 89), engraved on their edges with arabesques, with delicate single bulbs with tears in them half-way up the stem, or with tall tapering square stems with half a turn in their length, shouldered at the junction with the bowl (Fig. 90). Others, again, have long slender bowls supported on short stems, with moulded tops and bases, or moderate bowls with tall and somewhat harsh standards blown into large bulbs separated only by mouldings. Certain very fine sapphire-blue glasses, true masterpieces of Liège, and commemorative of marriages, etc., were also made here. Smaller Liège glasses are characterised by diagonally furrowed or fluted funnel- and bell-shaped bowls, apparently started in a mould, the stem being drawn out of the cups and fashioned by the pucellas into plain tops and simple expanded bases, and so that the flutes disappear and reappear according to the pressure of the tool and the diminished or increased diameter of the stem; plain feet are attached to these glasses, and always folded, a favourite fashion of Liège make. The metal is very bright and limpid, but lighter than English glass of the same period, and with less ring in it. Other Liège glasses of note are those with short wide bowls, of which the lower part is strengthened by ribs or trailings in zigzag, the stems usually consisting of a series of bulbs, and the feet always folded.[1] With this Liège group may also be included the openwork glass baskets, *corbeilles ajourées*, with trailed and pinched denticulated bases; the rude *bénitiers*, decorated with twisted blue and white rods, and the primitive water barometers which tend to reveal the truth only after the event. Peculiar also to Liège are the smallpoxed, or, as the Wallon tongue has it, *verres frêzés*, namely, glasses covered with small spots in relief, said to be the special cups for Burgundy, and with moulded stems and high domed and folded feet, and, as in some rare examples, with wings. To these may be added small vessels in the shape of military jack-boots, edged and spurred with blue or quite plain, recalling the almost ceaseless rolling of the tide of war in the days of Charles XII., the Earl of Peterborough, and Prince Eugene;[2] and, not least interesting, the long-necked Spa water-bottles, like flattened gourds, with their painted wooden stands, and the glass candlesticks, following the lines of those in brass, before the separate nozzles came in.

It would certainly be a bewildering effort for the reader to follow him if the writer were to attempt the task of assigning to individual towns the origin of more than a very few of the numerous fantastic glasses that were produced during the seventeenth and eighteenth centuries

[1] The author acknowledges his indebtedness to M. Baar, President of the Tribunal of Commerce at Liège, for the opportunity of studying his remarkable collection of Liège-made glasses, of which the extraordinary limpidity and brilliancy is a very noticeable characteristic. Many Liège glasses are spoilt by inferior engraving by the wheel of animals, etc., on them.

[2] But the exaggerated reports of victories which reached England were cautiously received by the town. For instance, the battle of Peterwaradin was won by the Imperialist forces under Prince Eugène against the Turks, 6th August 1716, and is thus alluded to in the following extract from a letter dated 17th August from R. Graham to the beautiful Mrs. Anne Chauncy of Yardley, near Stevenage, Hertfordshire:—

"I show'd your Letter to Sr Charles: and thro' his Coat, and 2 Wastcoats cou'd plainly see his Heart jump for Joy. He is fully determin'd to see Yardley, and its beautiful Mistress: But (whether he thinks He shall look better, when his cold is gone off: or perhaps stays, till his new clothes are made) he has not yet nam'd the day. The Town is very Empty both of Company and News. Pr. Eugenes glorious Victory is, at present, our only Entertainm^t^. We had once killed 100,000 Turks upon the spot, but the heat of our Fury being over we cool'd, and quickly fell to 50,000: and now (more merciful still) we have slain but 30,000 of 'em in all. Our Prince and Princess of Wales dine every day at H. Court in publick; surrounded with a Crowd of white Aprons, and Straw-hats: which doubtless must needs be very delightful to them, because it puts 'em in mind of the place from whence They came." — *Original Correspondence*, 1633-1828, Families of Rogerson, Postlethwayt, Kerrich, vol. xxvii. p. 92; in the possession of Albert Hartshome.

in the Low Countries. The names of numbers of them, mere trade or slang terms—such as *amprons, gorlettes*, have been preserved with others of more legitimate title in documents, printed lists, and glass-makers' inventories, though examples of the objects themselves have well-nigh perished.[1] Thus we have the much discussed *guédouffes*[2] —Germ. *kuttrolf*—presumably our own "goddard," of mediaeval, perhaps of Roman origin (Figs. 91, 92); the glasses *à boutons*, specialities of Lille; the *godinettes*, the *bucks*, the *masterlettes*, the beast-glasses—*verres à bêtes*, and those *à la bonne femme;* the bird glasses, the *escarbots, massacottes, triboulettes, twyfelaers*, and the mediaeval *ourinals*—alike the retorts of the alchemist and the water-globes for the poor Flemish flax-thread spinners in their damp underground rooms, and the lace-makers weaving the subtle webs—*Lavori d'Aracne*—of Brussels, Mechlin, or Valenciennes.

Fig. 91. (One quarter.)

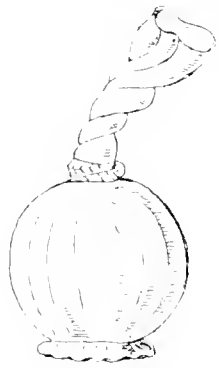


Fig. 92. (One quarter.)

That glasses inscribed to Freedom and Liberty should be frequently met with in the Low Countries is natural enough in a land where independence was so long and ardently struggled for, and had such lofty champions. Besides those inscribed with the words DE VREDE, DE VRIHEŸD, VREEDE EN VRŸHEIT, etc., the national feeling found expression in many glasses of the earlier part of the eighteenth century engraved by the wheel, with a representation of a bird escaping from an open cage, or perched upon it, and inscribed above AUREA LIBERTAS.[3] Throughout the century the subject was constantly shown, both by means of the diamond point and fluoric acid etchings, elaborated with figures and foliage, and worked with the greatest refinement upon English faceted glasses, in the style of Greenwood and Wolff, those able masters themselves also paying their delicate tribute to Sterne's "thrice sweet and gracious goddess."[4]

As to the origin of the so-called twisted-stemmed glasses with opaque, white, or coloured lines, they are clearly survivals, or rather revivals in a different material, of the reticulated filigree or lace glass—*vitro di trina, a filigrano, a retorti, a reticelli*—of the convoluted stems of Venetian vessels, and it is probable that when, under the pressure of events, the glasses "façon de Venise," with their stems of slender undulating opaque white and many-coloured rods, gradually fell out of favour, there was for a time a pause in this direction. It was not at first realised that a very attractive feature of the old artistic glasses could

[1] M. Schuermans gives a valuable classified and annotated vocabulary of terms used by glass-makers for their productions from the beginning of the seventeenth century in his Lettres IV. p. 316, VI. p. 259, and VII. p. 357.

[2] Rabelais says (*Pantagruel II.*, xvi.) that Panurge carried "en la poche une petite guédouffle, pleine de vielle huile, et quand il trovoyt ou femme ou homme qui eust quelque belle robbe, il leur en gressoyt et guastoyt tous les plus beaulx endroicts." Thus it was a vessel with a single orifice, from which oil could be made to issue drop by drop, as its derivation—*gutta fluere*—implies, and not a gimmal flask for oil and vinegar as some have supposed. Cotgrave, in 1611, describes the *guédouffle* or *guédouille* as "small oyle-pot, most commonly covered with leather," just such a thing as the spiteful Panurge would have carried in his pocket. This is a good example of the curious philological questions that are called up in discussing the obscure words which have been preserved in glass-makers' lists.

[3] Such a glass with the latter variety is in the collection of Monsgr. de Béthune.

[4] In the Slade Collection, No. 902, is a wine-glass with an opaque twisted stem on which Wolff has depicted with most exquisite delicacy, by means of fluoric acid, a boy and a girl setting a bird free from a cage; on a scroll above are the words AUREA LIBERTAS.

still be retained, worked in the new metal, and applied in a simpler manner, and with thicker rods for the standards of wine-glasses then coming into demand. There was, therefore, as is usual between two styles, a transition, during which the slender convoluted and filigree rods, and the twisted ribbed baluster stems of the glasses "façon de Venise" gradually passed to the straight filigree stems in flint glass. There was thus a suspension between the two styles of something less than a quarter of a century, and the transition marks the distinction between the glasses in the old and in the modern metal. During this period, say, between 1690 and 1720, the straight ribbed-twisted standards made their appearance, and they have particular interest as being the oldest of the simple stemmed glasses—the stengel gläser of Germany—that have fallen under observation. And it is during this time also that the artistic glasses "façon de Venise," which had already been rapidly falling into disfavour since about 1680, passed almost completely away in the Low Countries; so that very shortly after the end of the first quarter of the eighteenth century the glasses which we know generically as those with "twisted stems," that is, with thin air-threads, and opaque white spiral lines in their standards, alone remained to represent the artistic sinuosities in the stems of the Venetian glasses which, for two hundred years, had been such familiar objects on sideboards and tables in the Low Countries. Such, in a few words, appears to have been the rise of the twisted-stemmed glasses in flint glass; and as they undoubtedly had their origin in the Low Countries, so it is probable that they were first made at Antwerp, and then at Brussels and Liège, and without question within a few years of their revival in nearly all the principal glass-making towns both of the northern and of the southern Provinces.

Speaking now only generally of the drinking-glasses in these parts of Europe, it will merely be necessary to say that the manufacture of twisted-stemmed glasses in the Low Countries was carried on collaterally both with the other vessels, to which allusion has already been made, and with the glasses of the latter part of the eighteenth century, to which attention will be briefly called. Like other art objects they had, of course, their varieties of shape, often indeed slight, but sufficiently marked to enable the inquirer to range them in groups and in order of date, so that the tall champagne or Rhenish wine-glasses with twisted stems, the more moderate ones for French or Spanish wine, and the small glasses for the "schnapps" and the "oude klare" and the cordial waters of the still-room, may be respectively tracked down step by step, and something like order evolved from seeming chaos. To follow the twisted-stemmed glasses in detail at this point into the present century, and show how the last traces of Venetian filigree in legitimate descent, and as genuine articles of commerce to meet a certain demand, gasped to an end within living memory, would not be in accordance with the plan of the present attempt; they will be touched upon at large in another place. The course of these glasses in the Low Countries was coeval with their succession in England, where the air-threaded—quadrillé—and the opaque twisted stems—torsiné—were carried to the highest degree of excellence in special English shapes, with the best glass in the world, but ending badly—as long descended artistic things must do—in fine-drawn and tightly-wrung standards, sometimes of many colours. As contra-distinguished from the English, the latest Dutch examples have their stems loosely and imperfectly made; the lack of full ring, sometimes of any ring at all, in the metal, the dulness of the white twists, and the form of the bowls, readily mark their origin. On the other hand, the Dutch "ruby stemmed" glasses, though nearly always worked together with inferior white twists, have an excellent effect; they

were produced, to meet a natural demand, up to the end of the last century in the principal cities of Holland, as well as in Liège, and some other Belgian centres of glass-making. The glasses with expanded mouths—*évasés*, with bulbs or knops in the stems, sometimes also twisted with white and ruby and blue, perhaps in allusion to the national colours of the Netherlands,[1] the tall champagne glasses of the "flûte" form and those of the "port" shape, are most frequently met with. Ruby stems were never seriously attempted in England.

Somewhat degenerate descendants of the great thistle-shaped cut goblets with bulbous faceted stems of the early part of the eighteenth century, are the tall tapering champagne glasses elaborately cut in facets from the top to the bottom of the bowl, often, in the later examples, with octagonal and banded cut stems and square feet, and probably of Amsterdam make; their style of decoration necessitates their thickness. Of a similar shape, and of the end of the century, are those with faceted stems and decorated with gilded borders, festoons, stars, etc., so poor both in style and execution as to lead to the supposition that they were copied in Holland from German or Bohemian originals. It is very doubtful whether cut and gilded crystal glasses were made anywhere in Belgium during the eighteenth century; and it was declared to the Council of Finance in 1791, that no furnaces for such purposes then existed in the Belgian provinces. The shorter cut and faceted stemmed glasses were produced in the Low Countries during the latter half of the century in the ogee form. Some beautiful varieties were made in England, but in the Low Countries they pass with austere square feet and graceless semi-oval bowls into the nineteenth century. In both countries they soon lapsed into the homely shapes of "port" and "white" glasses, of the traditional and beloved British type. The redeeming features of the English examples are the rare brilliancy of the metal, the beautiful parcel polished decoration of their bowls, the employment of some of them by Wolff for his delicate etchings, and their delineation in the canvases of Sir Joshua.

XII.—GERMANY—RHINE-LAND.

We have seen the establishment from Roman times of glass-making in the Rhine district, and the probability has been shown, through the evidence of the glass vessels from the graves, of the continuance of such an industry in the same region through Merovingian and Carlovingian ages. Interesting proof of the fame of the glass-makers from the Rhine district in the middle of the eighth century is given in the request of Cuthbert to the Bishop of Mayence for a man, one of the glass-makers in or near his diocese, to be sent to Northumbria to "make vessels of glass well." Whether such an artisan was despatched to Jarrow—as makers of window-glass and vessels were sent from Gaul at the instance of Benedict Biscop at

[1] In the possession of Mrs. William Wilmer are two minute waisted glasses 1½ inch high, with twisted stems of white, ruby, and blue. They are of great refinement, and perfect models in every respect of the glasses of the normal size. They are, perhaps, part of the furniture of a doll's house, of which such excellent examples are preserved in the Rijks Museum at Amsterdam, notably a full-furnished model of a house, covered with inlaid tortoise-shell, made for Peter the Great. Mrs. Wilmer's glasses were bought at Liège in 1894; they are probably of Liège make, about 1740, and were fashioned with the blow-pipe "at the lamp."

Wearmouth, eighty years before—we know not; such a record would have been welcome indeed, if only as a peaceful item in the bloody annals of Deira and Bernicia.

The character of some of the glasses made then, and long after, in the Rhine district, may be gathered from what will be said with regard to those of Anglo-Saxon times in England, many produced, as has been conjectured, in a defined glass-making district.[1] That the custom of using glass drinking-vessels was continued, and widespread in Germany, is indicated by a passage in the metrical life, by his disciple Candidus, of Eigilis, died 822, Abbot of Fulda, in Hesse Cassel, then forming part of the markgrave of Thuringia. In the description of the preparation for a banquet in the monastery we have ". . . alii normaque inclita vitro ordine composito miscebant pocula Bacchi." Also in the life of St. Odilo, Abbot of Fulda, died 1049, he is mentioned as pouring wine into a little glass: ". . . accepto confectim parvo holovitreo infudit merum."[2] All these, Mr. Nesbitt observes, "were very possibly articles of home manufacture;" it would seem that no other conclusion could be come to. We can form an idea of the appearance of at least some of them from the Michelfeld reliquary, dated 1282,[3] and of which the form and the details bear some resemblance to certain Roman trailed cups, which one is tempted to think may be due to long-descended traditions, through Merovingian and Carlovingian times.[4] The probable course of glass-making in the Low Countries, from the tenth to the twelfth century, has been pointed out, and it will be readily conceded that the scanty history of the art in Western Germany and in the Low Countries during this period must be read, not separately, but as a whole, and geographical boundaries treated merely as political accidents and in no way as affecting the question in consideration.

Under these conditions we may still look upon the Rhine district as continuing to supply the greater part of the glass requirements of an area, certainly very wide, but of which the confines may not now with any approach to accuracy be delineated. That ornamentation of blown glass vessels by means of sketchings, or by stringings in the same material, whether clear or opaque, is proper to the nature of glass—just as casting and chasing is for brass, and hammering for iron and the honourable metals—will be readily admitted, for it was a means of decoration which was naturally suggested by the material itself. The Michelfeld reliquary is valuable evidence. An important detail now presents itself for consideration—the origin of the *Nuppen*, or "prunts," to use the English technical but ugly word. These decorations were more mechanical than the stringings, but are also well hallowed by antiquity. They had their distant origin in the projecting bosses of Roman glass cups, blown into a mould like such once ordinary wares as the chariot-race cups, now so uncommonly interesting.[5] The Museo at Naples exhibits many examples of plain bossed and fluted cups from Pompeii, none of which can be later than 79 A.D., and it may be taken that the allied treatment of glass vessels, namely by adding irregular nodules or pellets of metal, transparent or opaque,

[1] See pp. 22, 33.

[2] The crypt with a very constricted ambulatory beneath the round church at Fulda, visited by the author in December 1860, has its vaulting supported by a low column with a rough imitation of an Ionic capital. This seems to date from the abbacy of Eigilis, and is a very interesting work. The church above is of the time of Odilo (see *Archaeological Journal*, vol. xviii. p. 109, "Notes on Circular Churches," by the Rev. J. L. Petit.

In the *Life of St. Odilo* it is stated that a "vas pretiosissimum vitreum Alexandrini generis," belonging to the Emperor Henry, and having been broken by a fall, was mended by the saint.

[3] See p. 34.

[4] See *Slade Catalogue*, p. 38.

[5] See p. 11.

by way of ornamentation, was a later and a less skilful practice than the spontaneous operation which Pompeiian vessels show, and, of course, far inferior in technique to the lions' faces stamped on the glass prunts of Roman vases.

Most prominent and persistent of all the decorative features of the glasses deriving from the Rhine district are the *Trauben-* and the *Stachel-Nuppen*. The earliest examples that we have met with occur on a reliquary of pale green glass, found in the coffin of an ecclesiastic at Liège, together with the lower portion, to the under side of the knop, of a glass chalice.[1] There seems no reason to doubt the attribution of these remains to the end of the fourteenth century. That the nuppen of this period should not follow the form of any of those of Roman times is not surprising, but that an example of a glass with grape or beaded nuppen—sometimes also likened to strawberries, and a fashion of decoration which has been continued uninterruptedly down to the present day in the self-same Rhine district—should be found of so early a date, is a remarkable instance of the endurance of an ornament. For reasons too numerous to enter upon here we have arrived at the opinion that the nuppen, as we know them on the glasses of Western Germany and the Low Countries, whether plain, with thorns, or stamped with grapes or in other ways, had their origin at some time during the fourteenth century, perhaps not before the middle of it. They are, as has been intimated, the decorations *par excellence* of the glasses of the Rhine district.

At this point we meet with a noteworthy variety of early German glass cups of the latter part of the fifteenth century. An example preserved in the small but choice collection of glass

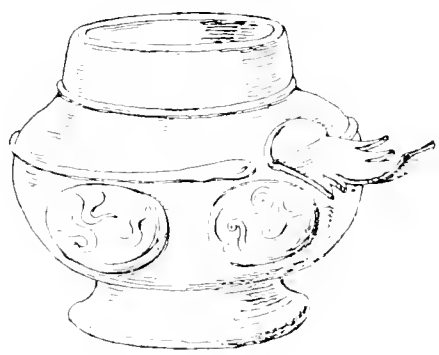


Fig. 93. (One half.)

Fig. 94.

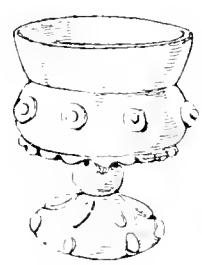


Fig. 95.

vessels in the Städtisches Kunstgewerbe Museum at Cologne is of dark green colour; it has a single flat leaf-shaped handle jutting out, and is decorated with compound prunts, or such as have three thorns on them, formed by a second operation of touching the nuppen with tips of molten glass, thus forming thorns, and laying them down with half a turn (Fig. 93). Such cups occur in early Flemish pictures—for instance, in a Last Supper by T. Bouts (1400-1475) (Fig. 94), in the Palais des Beaux Arts at Brussels, shown as in pale brown glass, and with a curious spur-like handle, which would pass between the fingers and steady the vessel when in use. Another example of much the same shape is seen in a picture in the same gallery, by J. Mostaert (1474-1555), (Fig. 95); the date of these rare cups is therefore assured, and the Cologne example becomes an important link in the history.[2]

[1] See p. 35.

[2] These are undoubtedly quite late fifteenth-century versions in glass of the rare silver vessels, with single handles jutting out from the bowl, of which the Rodney and the Hamilton cups offer examples. Allied to them in general form are the silver-mounted double wooden cups of Italian and of South German origin, of which examples exist, as well as representations of them in ancient German heraldry, and in early printed books. They are distinct from mazers. Several gold-mounted

Again, the evidence of a glass reliquary presents itself in illustration of early glass objects of the Rhine district, and carries us on for another century. This is a vessel, properly called an Igel, from the altar of a church in Vinstgaue in the Tyrol, and dated 1519 by the parchment which it enshrines.[1] It is decorated with stachel-nuppen, irregularly disposed upon it, and both its date and character show it to be quite free of Italian influence.

Amateurs will have observed the curious variety of the prunts not impressed with a stamp—whether raspberry, blackberry, strawberry, or mask—a variety brought about by the deft manipulation of the glass-maker, and it will be at once noticed in a collection of Rhine glasses that the inclination of the thorn is invariably, for reasons of manufacture, in a direction reverse to that of the lobes of the ancient Merovingian cups. A usual ancient practice was to drop the lumps of molten glass on the vessels and to leave them thorned and unstamped. With these plain stachel-nuppen, variety is found in the final treatment of the thorn or spike of glass left on the boss by the sudden withdrawal of the operator's hand. This action generally results in a more or less sharp point like that of a mediaeval prick spur, varying according to the liquescence or the character of the metal. Other thorns are snipped off square with the shears, or manipulated with a turn of the hand, and laid down on the prunt like a pig's tail; curved over or under into a loop to receive jumped silver or metal rings—an idea derived from the goldsmiths (Fig. 96); or deeply indented with a thick round-ended punch, forming bosses on the interior of the glass. The rare vessel at Cologne, already spoken of, has prunts with three thorns carefully laid down upon each of them, with half a turn; these are, perhaps, unique examples, and they show how familiar the fifteenth-century glass-makers were with their manipulation.

FIG. 96. (One quarter.)

The plain nuppen, without the stachel or thorn, are equally Dutch and German; they are the most artistic and effective of all. It appears that the glass, after the application of these decorations, was submitted to the furnace. The thorn vanished before the heat, the prunts were "rendered down," and by rubbing became extremely flat, and blended with the happiest effect, and almost imperceptibly, into the surface of the stem of the glass. The ringed or corrugated base was spun on afterwards. Such smoothed prunts are usually found on the roemers with wide expanded mouths, and vessels so ornamented were known in Holland both as berkemeyers and roemers, the former term applying rather to the more capacious vessel. In Germany a roemer of large size was also known as a *Humpen*, a name applicable to every large German glass and signifying a brimmer or bumper. The Low Country artists, with their keen perceptions, never tired of introducing the berkemeyers and the roemers into their delightful pictures; their characteristics, whether made in Holland by Germans, or by their Dutch imitators, or in the Rhine-land, the country of their origin,

examples are preserved in the Pitti Palace at Florence, and there are three silver-harnessed ones in the South Kensington Museum. The first, 7 inches high, is called English, the capacity of the upper portion being just one half that of the lower part; another, $4\frac{3}{4}$ inches high, with ihs on the lid, is German, and dated 1493; the third is only $2\frac{3}{4}$ inches high. In each the single handle is of silver, and of the characteristic form. A very fine example, about 1530, in silver, parcel-gilt, 12 inches high, belongs to the parish of Edenham, Lincolnshire.—See *Archaeological Journal*, vol. xi. p. 187; and W. Cripps's *Old English Plate*, p. 214, edit. 1886, for illustrations.

The pictures show the glass vessels to have been too large, and, indeed, too delicate and fragile, for a probable use of certain of the smaller silver or wooden ones, namely, for taking assay of the drink.

[1] See p. 35.

have already been touched upon,[1] and it need only be added now, without disparagement of German examples, that the roemer made in Holland and decorated by Dutch artists in *grisaille*, in gold, or with the light touch of the diamond point, was there brought to its highest point of artistic excellence. The primary purpose of a roemer was for Rhenish or "High Country" wine, as distinguished from the vintage of the same title from the Médoc district; it consequently had no cover. The varieties of form which it presents are almost endless, the traditional co-colours being shades of green, yellow, and blue.[2] They were occasionally made white, of which more later on. Covers are found with the largest roemers "de parade."

Like those of the Provinces the small early glasses of Western Germany are well illustrated by the pictures of the Low Countries, and by a few old German ones, and sometimes by a representation in painted glass; they all show much the same forms. From these sources generally the growth and varieties of—I. the Igel; II. the Krautstrunk (Plate 13), which is nothing but an elongated igel; III. the Roemer; and IV. to a certain extent the Passglas, are well shown; after about 1530, saving the passglas, of which early examples are rare, they begin to be further exemplified by the vessels themselves, and from the end of the sixteenth century onwards by the boon of Dated Examples, the absence of which in England has been the bane of many a collector.[3]

I. The Igel, so named after the animal, the hedgehog, would seem to have been the type of German glass from which the roemer, with its numberless varieties, was evolved; but the well-known normal shape was not arrived at before the middle of the sixteenth century: the steps in the evolution are not quite so clear as one would wish to find.

II. The Krautstrunk, so called from its fancied resemblance to a leafless cabbage stalk, was a short-lived vessel, notable for the accuracy with which its long body was closely studded with prunts. It was early overwhelmed by the roemer.

III. The earliest Roemers have the simple denticulated ring as foot, like the igel of the beginning of the sixteenth century, and it seems to have been the gradual amplification of the mouth of that vessel, the modification of its body, and the change in its foot, which produced the popular glass. Whether the name has reference to a supposed *Roman* origin there is no evidence to show, nor do we know how old the name is. A collection of drawings of roemers shows that the first denticulated base was partially replaced quite early in the seventeenth century by the narrow spun foot. This was deepened until the height of the foot and the stem together equalled that of the bowl. Thus the best shaped glass was arrived at about the middle of the seventeenth century, as the beautiful existing examples of roemers proper show, the proportions being:—bowl 4 parts, stem 3 parts, foot 1 part,=8 (Fig. 97). Then there was a pause in style because a good glass had been reached, but there were naturally many variations from it. A delicate sea-green roemer in the British Museum offers an excellent example (Plate 14). It is engraved with the diamond point with the bust of William II. and the words—*Noch Leeft Orange*. He was father of William the Deliverer, and died in 1650. The denticulated and the plain shallow

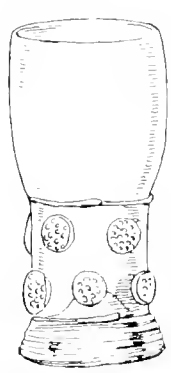
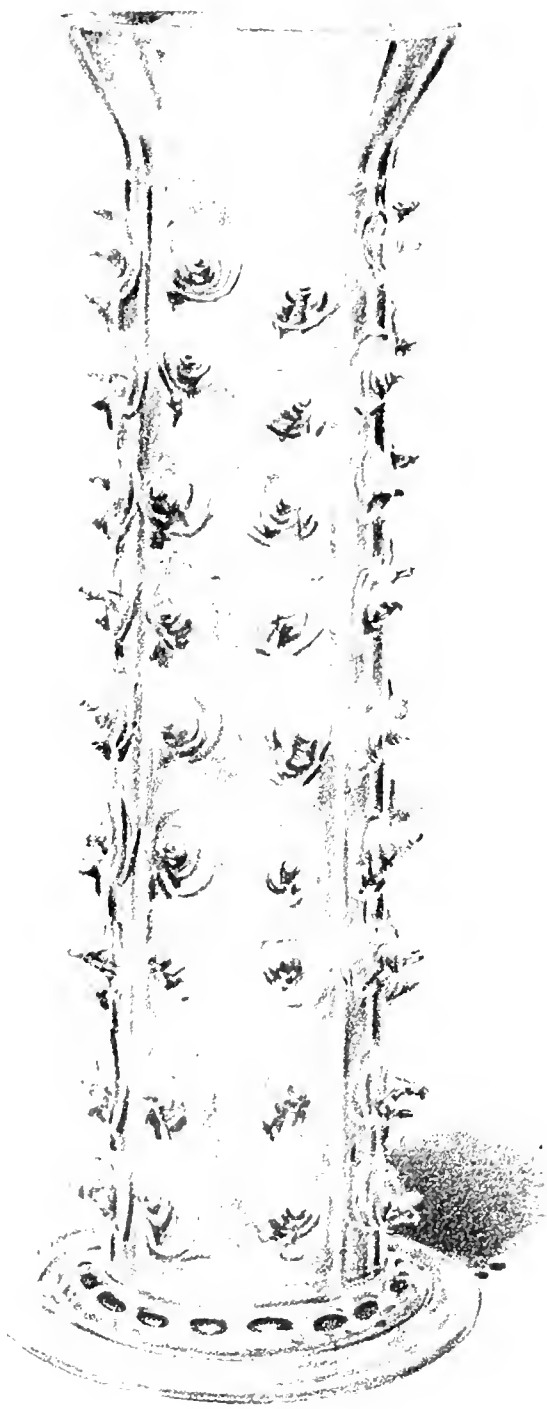


Fig. 97.
(One third.)

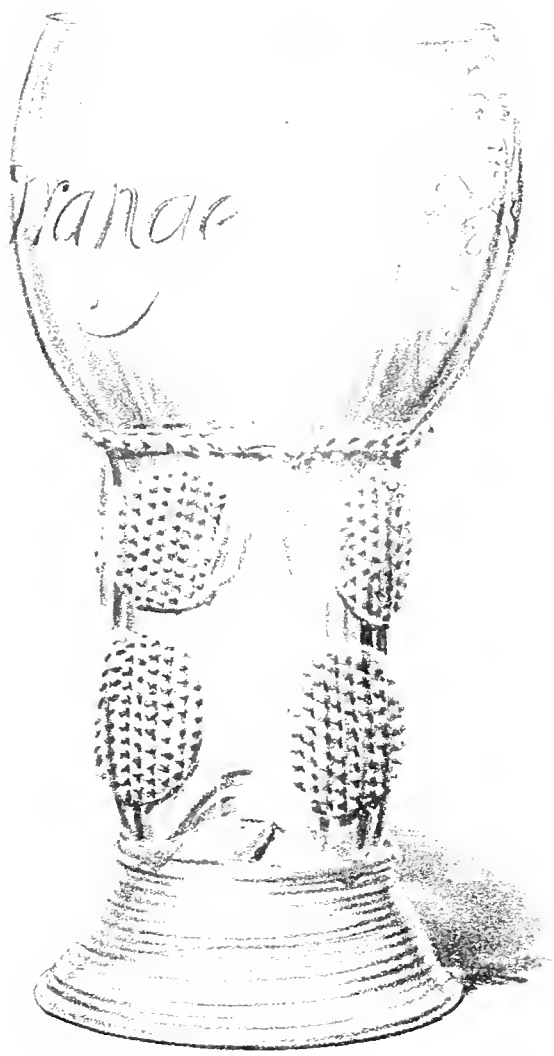
[1] See p. 47.

[2] At Ehrenfeld the shades of green are classified as: antique green—*antique* referring to the Middle Ages; moss green, apple green, yellow green, olive green, sea green, and clear sea green.

[3] See p. 47.



13.—GERMAN GLASS.



14.—DUTCH GLASS.

bases survived until long after the middle of the seventeenth century. Towards the end of it the spun feet gradually rose higher and higher, always at the expense of the stem, until at the end of the eighteenth century the latter had become so short that there was barely room on it for the almost invariable quilled neckband, and three or four strawberry-stamped prunts set horizontally. This condition is shown by an example in the author's cabinet. The proportions now were:—bowl 4 parts, stem 1 part, foot 3 parts, = 8; the heights of the stem and of the foot having changed places (Fig. 98). So the shape degenerated, and between the two sets of proportions given, the form of the roemer proper oscillated during something like a hundred and fifty years. It may be borne in mind that a roemer was always made in two parts only—the stem, forming a portion of the bowl and contributing to its capacity, and the added or spun base or foot. It is apparent that the deep bases of roemers of the latter part of the eighteenth century were blown and moulded on a form, and subsequently stringed in imitation of the early spun feet. For convenience of form and use, and other attributes, it is doubtful if any better glass was ever devised than a well-proportioned roemer, and it continued to be made in the land of its origin throughout the eighteenth century, notwithstanding the steady advance of the white glasses from Bohemia and Silesia on the one side, and the flint glasses from England on the other. This is sufficient proof of its worth.

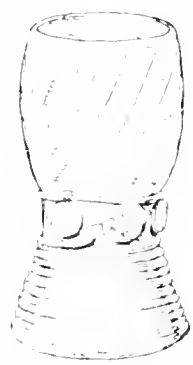


FIG. 98. (One third.)

In addition to the variety of roemers between the two forms just alluded to, there were the very rare short igels with prunts, and denticulated, or plain ringed bases, called "Schmuckschälchen,"—toilet-trays, but more suitable as dishes for sweetmeats or spices (Fig. 99); the early turbinated glasses; the thick maigelein for cordial waters; the heavy cylindrical prunted cups, which have already been spoken of;[1] and the thin stringed cups with movable glass rings, which may quite well have been made in the Rhine-land under Italian influence.[2] Space would fail to show in detail here the collateral development of some of the early rude cups into tumbler-like vessels, *évasés* and decorated with prunts, and with masks "façon de Venise"; it must suffice to say that these glasses were in due time replaced or swallowed up by the roemer, German and Dutch, the humpen, and the berkemeyer. Finally, as we have seen, the roemer and its varieties held the field in Western Germany and the Low Countries, and became the keynote of the table-glass industry of that spacious region.

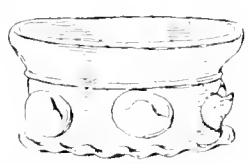


FIG. 99. (One quarter.)

With regard to the special vessel which we must consider as an expanded and more substantial variety of the roemer, and more properly spoken of as a berkemeyer, it exhibits, as we have said, more than any other vessel, the smoothed prunts. The "Vincens tui" glass already illustrated (Plate 10) is a capital example. The glasses of this shape have shallow spun feet, and were greatly admired by the Dutch painters, particularly by Franz Hals, as his pictures at Haarlem show. The character of their feet did not fluctuate like those of the roemers, and their manufacture in the best artistic forms, in pale green and yellow glass, appears to have ceased soon after the middle of the seventeenth century. They were eclipsed, in fact, by the roemers.

[1] See p. 52.

[2] See p. 51.

IV. Touching the Passglas, its usual type was a tall cylindrical vessel more or less regularly spaced, by fine wheeled stringings, into divisions for measuring and controlling the drinking; it was usually planted upon a low conical foot, and frequently had a cover (Fig. 100). Those that were made in the Rhine district are sometimes slightly pressed, from the rim to about half-way down, into an octagonal form. Pale sea-green and gray are generally the tints of the earlier of these very fragile and choice vessels. There is a fine pale green example in the Städtisches Kunstgewerbe Museum at Cologne (Fig. 101). Rembrandt, with

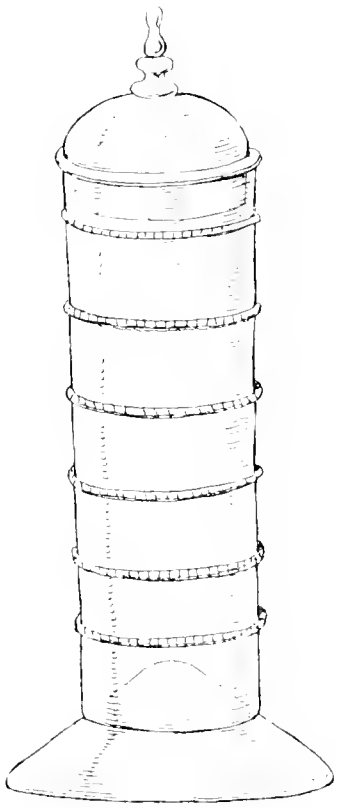


FIG. 100. (One quarter.)

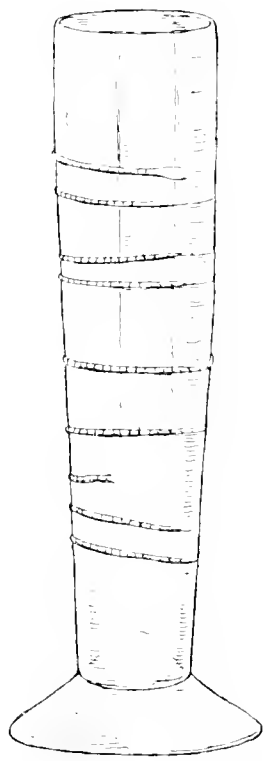


FIG. 101. (One quarter.)

his wife upon his knee, in his portrait by himself at Dresden, holds up exactly such a Rhine-land Passglas. We shall revert to them later on under their different treatment in the Forest, and their manner of use.

It will have become obvious that, for a full realisation of the circumstances of glass-making in Western Germany during the sixteenth and seventeenth centuries, the vessels and their history must be studied together with those of the Low Countries during the same period, exactly as with the scanty records of the art and the glass cups of earlier times. The subject is so large that it naturally can only be skirted now by an amateur and "outlandish man."[1]

[1] All the ancient varieties of the Rhine-land glasses have been reproduced at Ehrenfeld, near Cologne—not with the natural artistic irregularities inseparable from the old examples, but with the frigid accuracy associated with modern science. Fanciful names, such as, "Dagobert-Römer," "Wieland-Humpen," "Weinbecher-Chlodwig," "Gambrinus-Pokal," etc., have been given to these productions apparently for identification for purposes of trade. A large number of other forms allied to them have also been devised with a view to modern requirements and tastes: and other vessels, such as punch-bowls: jugs, etc., skilfully adapted from the old styles, as well as imitations of Italian and German cut glasses. Some of the new forms, particularly those for Rhine wine, have much merit. The improvement which has taken place in the table glass industry within the last ten years is very noticeable in good houses and hotels in Germany. The punctiliousness with which special shapes are insisted upon for certain wines is a survival of the custom of the seventeenth century. A similar reversion, as to table glass, to earlier

That Cologne took a part, but a moderate one, in the general artistic movement with regard to glass-making "façon de Venise" as early as in 1607, has been shown by the late M. Pinchart from the *Ratsprotocolle* of the city between 1607 and 1609. In the former year two Venetians offered to establish a glass-house at Cologne on condition that they should enjoy the same privileges which had been accorded to other industries of the same kind at Antwerp and Amsterdam. They were allowed to set up a furnace in the street of Saint-Severin, but this was soon complained of as a danger by the neighbours on account of fire. The following year the Venetians fled—riddled with debts. Shortly after others appeared, but they were not successful, for in 1611 it was stated that their furnaces "étaient allées en fumée."[1]

Upon these limited circumstances of operation an extended interpretation was based, in 1876, to the effect that the numerous "winged" and other Venetian glasses to be met with in the Rhine district, which were regarded as Italian art, proceeded from the Cologne glass-works.[2] This was before the researches of the antiquaries which have laid bare the history of glass-making "façon de Venise" in the Low Countries. Similarly, Demmin makes the strange attribution of all the winged glasses "façon de Venise" to Dessau in the principality of Anhalt,[3] in a glass-house founded in 1669, and where Italians were not introduced until 1679; this furnace was closed in 1686. The fact is, that such glasses were made, but not necessarily to a large extent, in the sixteenth and seventeenth centuries, besides at Cologne and Dessau, at Kiel, Vienna, Weidlingen, Nuremberg, and many other places in Germany, just as they were made in the Low Countries, in France, in Spain, and, but to a somewhat less degree, in England. The origin, development, and decay of the art was nearly synchronous in each realm; the same artistic workmen—whether "contracted" from Altare or runaways from the power of the Council of Ten—moving from place to place, or from country to country, produced everywhere much the same objects from mainly the same materials. The whole of the glass-works on the continent of Europe were affected and stimulated in varying degrees by the movement, and the influence of the Italians had everywhere the same general effect upon the home industries. It was less marked in Germany than elsewhere, partly because Venetian glasses were hardly capacious or substantial enough for ordinary German requirements, particularly in so far as beer-drinking was concerned; the case was much the same in England. And, however much the graceful or fantastic shapes from Italy

forms is noticeable in the glass-making districts of Bavaria and Bohemia and the parts adjacent.

At Prague may be seen the decoration of modern glasses with enamel and gold carried to the highest pitch of perfection, but at times with an excess of ornament, and a touch of garishness, upon coloured glass of great beauty and of all hues, such as the old men never dreamt of, and far superior to the vapid tints of the Tassie gems, so attractive to the British public in the Gold Room in the British Museum. Alongside of these are glasses painted with black dancing figures, and others, modern Viennese vulgarities, which would have astonished and offended the old glass artists indeed. This, it may be hoped, is only a passing caprice. The armorial glasses, always popular in Germany, are picturesque and good, and the heraldry capitally drawn.

[1] A. Pinchart, "Les Fabriques de Verres de Venise," etc., *Bulletin des Commissions Royales d'Art et d'Archéologie*, vol. xxi. p. 388.

[2] " . . . und es ist anzunehmen, dass die vielen am Rhein vorfindlichen Flügel—und anderen venetianischen Gläser, welche man bis jetzt für italianische Arbeit gehalten hat aus der Kölner Glasfabrik hervorgegangen sind."—M. Thewalt, *Kunst historische Ausstellung zu Köln*, 1876, p. xv., preface.

[3] "Les verres à ailettes attribués à tort, avant mes recherches, à la verrerie de Venise, ne datent que du XVIIe siècle, où ils ont été soufflés à Dessau, dans une manufacture fondée en 1669, au château d'Oranienburg." —*Guide de l'amateur de faiences et de porcelaines*, p. 1331, edit. 1873, quoted by M. Schuermans, Lettre I., p. 138.

may have been admired, the practical character of the German glasses was never lost sight of. This is fully evinced by the great glasses from the Forests—the Waldgläser—both plain and decorated, which have marked originality and owe very little to Italian influence. They will be spoken of presently.

XIII.—THE HEDWIG GLASSES.

While the glass-makers of Germany of the late thirteenth, the fourteenth, and the fifteenth centuries were struggling with their modest home-made cups, trailed or prunted, the East was sending, as to England and France, the enamelled glasses and vessels, such as the cup at Breslau, dedicated to St. Hedwiges, or Avoice, the patroness of Silesia and Poland, died 1243;[1] the Damascus glass at Munich; the holy earth vase at Nuremberg; and the two at Vienna from the same sources, still containing their prized contents. At the same period also came, by another route and from a different origin, the remarkable heavy tumbler-shaped so-called Hedwig glasses, more advanced in style than the crystal vessels at St. Mark's, Venice, taken at the sack of Constantinople by the Crusaders in 1204, but like them emanating, as we are greatly inclined to believe, from Byzantium.

Of these peculiar cups—"Hedwigsgläser"—seven have been preserved, viz. at—1. Breslau, in the Museum; 2. Cracow, in the Cathedral; 3. Nuremberg, in the Museum; 4. Amsterdam, in the Museum; 5. Berlin, in the possession of the late Major-General Röse—this came from Halberstadt Cathedral in 1820; 6. Halberstadt, in the Cathedral; and 7 Minden, in the Cathedral. Records remain of the former existence of others.

The Hedwig glasses have long been considered by German antiquaries, and the subject has been fully discussed by Herr E. v. Czihak,[2] and the opinions of MM. von Essenwein, Friedrich, A. Hoffman, Gerspach, Bock, and his own conclusions given. None of these authorities pronounce decidedly for the Byzantine origin which, with all respect for their convictions, we are disposed to claim for the glasses, and as to which we are supported by the character of the Byzantine vessels at St. Mark's, and the opinion of Mr. Nesbitt, and his ascription of them, and of the Hedwig glass at Cracow, as well as by the testimony of M. Garnier. It is true that there are great difficulties in the question; this is marked by the indecision of the German antiquaries, the Orient, Byzantium, Bohemia, and Germany having been severally suggested as the source of the objects, and even a possible date so late as 1370 proposed. Their peculiarities place them in a distinct class and they have to be judged accordingly, but we must think that the place of their manufacture, if not actually at Byzantium, was at least strongly under the influence of Byzantine art.

The Hedwig glasses are very thick, generally more than a quarter of an inch, dark in colour, with many bubbles, and deeply cut on the wheel, so that the figures stand out in relief. There is a marked resemblance between them, indicating not only one manufactory, but suggesting the same artist at the wheel, and about the same date for the whole series. Under a

[1] See p. 21. Illustrated as in following *note*.

[2] *Zeitschrift fur Christliche Kunst*, III. Jahrgang, Heft 11, s. 329, 1890; *Die Hedwigsgläser, mit Lichtdruck und 5 Abbildungen*; and *Schlesische Gläser*, s. 184, with the same illustrations, edit. 1891.

15.—BYZANTINE—"HEDWIG'S GLASS."

Byzantine ascription the Hedwig glasses would have been valued objects passing to Northern Europe along the ancient trade route from Byzantium through Hungary and Bohemia, and as such naturally dedicated to a revered patron saint, and deposited in great churches. Thus at least the examples existing in the cathedrals of Cracow, Breslau, and Halberstadt would be properly accounted for, and quite apart from the question of glass vessels of Damascus of a very different character. These may have been brought by German crusaders or by pilgrims from the Holy Land, or have come as prized articles of trade by way of Venice or Genoa, and are generally later in date than the Hedwig glasses proper.

The Amsterdam example gives a capital type of the whole series, being engraved with two lions and an eagle, exactly as they appear on the Breslau, the Cracow, the Nuremberg the Röse-Halberstadt, and the Minden glasses (Plate 15). It is, moreover, unmounted, and has the following inscription engraved on the under side of the foot :—

Alsz diesz Glasz war alt tausent Jahr,
Es Pfaltzgraft Ludwig Philipszen
Werehret war. 1643.[1]

It belonged to the princely family of Orange-Nassau, whose ancestors were Stadhouders in Friesland, and came from Oranje Woud, their country seat in that province. The inscription is so far interesting as showing that in 1643 the origin and real age of the glass was quite unknown, although the date of all of them can hardly be earlier than the latter part of the twelfth century.[2] The glass at Halberstadt is covered with geometrical figures not easy to describe, but the character of the work is the same as on the others.

Nothing like the Hedwig tumblers has ever appeared in England, and they are among the most remarkable of the glass vessels which time has bequeathed. Their solidity has tended greatly to their preservation, added to the sacred uses to which they have been applied, whether as chalices or reliquaries, and the veneration with which they have been regarded as memorials of a saintly personage.

[1] The author is indebted to the friendly courtesy of Ihr. B. W. F. van Riemsdijk, Director of the Rijks Museum at Amsterdam, for a copy of this inscription and a full-sized drawing of the glass.

[2] The ignorance and superstition in ancient times concerning earlier memorials has often been exemplified. There was no easily available written history outside the monasteries, and within their walls, as without them, fables were not unacceptable, and many a queer version of an event crept into the *Chronicle* in the Scriptorium, and soon passed as history. Even Henry VI., when he "shewed his mind" in the Chapel of St. Edward concerning the place of his burial, knew nothing about the tombs of his ancestors in the abbey. He asked the Prior the names of "dyvers Kynges which lay on the southe syde of the saide Shryne aforesaide, tyll he come to the tombe of his fadre Kyng Henry the Vth wher he made his prayers," and declared "Nay let hym alone he lieth lyke a nobyll prince I wolle not troble hym." It was as rare then as now to "let things alone." Less excusable ignorance, in times by no means so distant, is attributable to the fables which the printing-press has promulgated, and which, as all antiquaries know, it is impossible to recall. Many fictions concerning old glasses have had to be resisted during the progress of the present work.

XIV.—BOHEMIA, SILESIA.

The establishment of glass-works in or near the forests and mountains which divide Bohemia from Bavaria, Saxony, and Silesia was brought about by the presence in the forests of boundless fuel, and of inexhaustible materials for glass-making in the primitive rocks of the heights, such as quartz, natron, manganese, and in many places on the eastern slopes of the mountains of a fine white sand. From the Fichtelgebirge, the pine mountains in Upper Franconia, at the westernmost point of Bohemia, issues the range known as the Erzgebirge, or ore mountains, which divide Bohemia from Saxony. These are not precipitous, the long slope being towards Saxony and the short one towards Bohemia, and with a few exceptions are wooded almost to their summits. Another range of mountains, the Böhmerwaldgebirge, or Bohemian forest mountains, runs in a south-easterly direction from the Fichtelgebirge, dividing Bohemia from Bavaria. In these mountains the long slope is towards Bohemia, while the very abrupt one faces Bavaria. Again, the Sudetengebirge, the Sudetsh chain, comprising the Sausitzer Bergplatte, the Isergebirge, the Riesengebirge, and the Erlitzgebirge, separate Bohemia from Silesia, and the Böhmer-Mährengebirge from Moravia, and thus the country is walled in. From the Fichtelgebirge runs in a north-easterly direction the Thuringer Wald, a mountainous chain about a hundred miles long, crossing the ancient kingdom of Thuringia, and dying out at Eisenach. It is necessary to bear these geographical conditions in mind in touching upon the early glass-making of Western Germany. The various sites which will be alluded to are readily identified upon the excellent maps in The Times Atlas.

Of an ancient glass industry in Bohemia before the fourteenth century no records have at present been made available; but we may reasonably conclude that glass-making in this country and in the parts adjacent took much the same course that it did in Western Europe, and that, as in the Low Countries and the Cologne district, nothing better than small rude cups and vessels for ordinary use—the best they could then make—were produced before the middle of the fifteenth century. The story of the industry must have been much the same in the Thuringian Forest as well as in other widely-separated places in Central and Northern Germany, where glass-making was early the natural result of materials for use conveniently at hand. The glass cups of the abbots of Fulda, Eigilis and Odilo, may have been remote examples from the neighbouring Thuringian Forest, far more accessible to the Benedictines of that ancient House than the district of Cologne.

Similarly, it was not until the period of the movement of the Venetians and Altarists—but not as a result of it—that the forest glasses took an extended and artistic direction. The state of the case must have been precisely the same in Northern Bohemia as in the neighbouring country of Silesia adjoining the Iser and the Riesengebirge ranges. This brings us to the point where Silesian and Bohemian glass-making appear to have had their origin, namely, in the valleys and slopes on either side of these eminences, on the southern side as to Bohemia, and on the northern, particularly in the Zackenthal, for Silesia. The frequent designation of places, "Glasshütte," "Gläzen," "Gläzersdorf," "Glatz," etc., attest at the present day, as names do in England, the ancient and extensive nature of

the industry both in Silesia and Bohemia. In each district up to the present day important centres of glass-making have remained firmly established. This is strong testimony to the merits of the local materials. We can only imagine what use the Romans would have made of them, but they were beyond their sphere.

Herr v. Czihak has shown[1] that there was one glass-house in Silesia in the fourteenth century, and at least three in the fifteenth and sixteenth, which were increased to seven in the seventeenth century. At the present day the number amounts to fifty-six glass-houses in six principal centres, a great increase being due to the introduction of coal as fuel since the beginning of the present century. In 1364 a glass-house near the existing village of Schreiberhau, in the Zackenthal in the Hirshberg circuit, close to the Bohemian frontier, was held by one Kung Kone; it was bought two years later by a certain Sydil Molstein:—"Sydil Molsteyn hat vorkouffet alden Cunczen glaser die glashutte in dem Schribirshau mit allim rechte, als er sy selbir gehabt hat vnd die do lyt in dem wichbilde zu Hirsberg, im, syne erbin vnd nachkomen. Do hat der herzoge (Bolko II.) zynen willen zu gegebin. Gegebin zu Stritisvorwerk am vritage vor Sente Lorencen tak, noch Gottes gebort anno Dom. 1366."[2] In 1371 another glass-house was let to Thomas Kegil, "Bekennen . . . das wir von vnsin furstlichen gnaden die glaschutte zum Schreibershow yn dem wichbilde zu Hirschberg gelein mit allin zogetanen rechte, nucze, geniesse vnd fruchtberkeit, als sie von aldirs gelein hat Thomasen Kegil vnd seinen erben gelegin vnd gelanget haben . . . gegebin zue Scwidnicz anno Dom. 1371 in die Sanctae Trinitatis."[3] This glass-house was sold to Kegil in the following year, "mit allen iren zugehor alz sie von aldirs gelegen ist vnd leit vnd mit allem rechte nucze vnd geniesze zu besiczen," etc., Anno Dom. 1372. The expressions "alz sie von aldirs gelein hat," and "gelegen ist," used in the formula for the two last sales, points to a foundation of this particular glass-house at least as far back as the beginning of the thirteenth century, and such foundation may be taken to have succeeded other and far earlier series of glass-houses on both sides of the Border. One would have been glad of such precise record of the glass industry in the middle of the fourteenth century in England, and in the vernacular of Chaucer and Wycliffe. But the first clear prospect we have of a Bohemian glass-house is of that set up about the middle of the fifteenth century by Peter Berka von Duba and Lipa, under the Tannenberg at St. Georgenthal near Haida, one of the oldest glass-making centres in Bohemia, and where numerous glass establishments are still to be found, as well as at Gablonz, at the present day a most active bead, mock jewellery, and button-making locality, with a large trade with Paris and Africa.[4] We also have the glass-houses of 1442 at Daubitz, and those at Falkenau and Steinschönau near Haida of the following year.

The Italians who came to seek for gold and precious stones in the mountains were known in the country as "Welsche,"[5] and also styled Wahlen—apparently with reference

[1] "Schlesische Gläser. Eine Studie über die schlesischen Glasindustrie früherer Zeit, nebst einen beschreibenden Katalog der Gläsersammlung des Museums schlesischer Altertümer zu Breslau," etc., von E. v. Czihak, 1891.

The author takes this opportunity of acknowledging his indebtedness to Herr v. Czihak for his able researches, and of which he has availed himself in the present notice.

[2] *Landbuch Schweidn.-Jaur.*, A, fol. 7*b*.

[3] *Ibid.*, C, fol. 24*a*.

[4] *Reports from the Consuls of the United States*, No. 103, March 1889, p. 393.

[5] Italy was known in the German of the Middle Ages as "Welschland," and its inhabitants as "Welsche" or strangers; similarly the German-Swiss style the Romance-Swiss "Welsche." The Cymri were called Welsh by the

to their seeking or selecting valuables, and were soon brought into relations with the glass-makers. Antonio von Medici, known as Anton Wale, has left instruction, of about 1430, as to digging after treasures—schatzgräberei, and while fixing the proper place for such ventures localises the spot by reference to the glass-works of Schreiberhau—"Item czu Hirspergk froge nach eynem dorffe daz heyssit Petirssdorf, dornoch keyn Seywershawe, do gehe obene den obir wegk kegin dem swartczyn berge vor dy glazchutte, zo komestu zcu dem weissin wassir adir zcu der weissin bach, zo findistu zcu waschen golt vnd ametissten. . . ."[1] Whether the Italian gold-washers and precious-stone grubbers were beneficial in the way of instructing the glass-makers in Italian methods must be an open question; that was not their purpose. Moreover, Italian assistance is not mentioned in the numerous notices of the glass-works in the Iser- and the Riesengebirge of the latter half of the sixteenth century. This indicates that help was not much wanted, and we find it stated, for instance, in the *Schlesischen Chronika*: "Es mangelt in Schlesien auch nicht an glashütten, darinnen Gläser von allerley Arten und Manieren erdacht und gemacht werden. . . ."[2] and "In Schreiberau supra Zacum fluuium; probantur vitra maxime quae candida et pellucida sunt."[3]

The Schürer family from the neighbourhood of Marienberg in Saxony, in the Erzgebirge, had great influence in the unfolding and extension of the glass-works in the Haida district. In 1540 Paul Schürer founded a glass-house at Falkenau; from this developed the Hiada-Steinschönau and the Bürgstein centres of glass industry. In the next generation John, son of Paul Schürer, set up, 1558, a furnace near Gablonz. His great-uncle Bartholomew was master of the glass-house at Grünwald, near the same place, in the early years of the seventeenth century, which had been set up in 1548 by Franz Kunz. The Schürer family, like those of de Bonhomme and de Colnet in the Low Countries, had an unbroken connection with glass-making until the beginning of the eighteenth century, a very noteworthy record of nearly three hundred years.

In 1600 a glass-house was built at Reichenberg near Gablonz, around which already in 1604 a whole village, Friedrichswald, had spread itself. After the two last generations of Schürers in the Gablonz district in the offshoots of the Riesengebirge, particularly at Starkenbach, these works passed into other hands, and from 1701 to the present day have belonged to the noble family of Harrach.[4]

At Nieder Roclitz in 1550 a certain Donath built a glass-house which came, fifty years

Anglo-Saxons for the same reason, and as speaking a different language, and being of a different race. M. Schuermans, referring to "Nicolas dit le Welche," who sought for and obtained leave to set up a glass-house "façon de Venise" at Vienna in 1486, says that "Welche est quelquefois pris pour Belge," and he makes the easy mistake of suggesting that we may have here the evidence of a German glass-house associated with a Flemish one, to which the brothers Dandolo of Venice referred in their request of 1507.—*Bulletin des Commissions*, etc., *ut sup.*, Lettre III., pp. 13, 25. In Peru "gringo" is the epithet universally applied to any foreigner, and the original English equivalent flourishes in its purity in the United States. The term of reproach applied to the poor terror-stricken bleeding wretch on an English racecourse is a striking survival of the mediaeval word *Welsche*.

[1] *Chrysopoeie*, Commonplace Book of Anton Wale, Breslauer Stadtbibliothek, Hs. R., 454, vellum page 2*b*.

[2] *Des kaiserlichen Rates und Kammerfiskals in Oberschlesien Schickfus* (1574-1637), A. a. O. IV. 34.

[3] *Stirpium et Fossilium Silesiae Catalogus*, 1600, p. 407. The whiteness and transparency are noticeable characteristics, as contrasted with the green and the yellow glasses of Western Germany and the Low Countries at that time.

[4] It does not appear that glass-making in Bohemia or in Germany implied any impeachment of nobility, as one would have expected, with the haughty aristocracy of those countries.

later, into the hands of Kaspar Schürer, who soon sold it on his setting up a furnace at Sahlenbach. The continued destruction of the woods drove the glass-houses nearer and nearer to the Silesian borders. After Sahlenbach came the glass-house of Seifenbach, where a second furnace was set up early in the eighteenth century. From this the Neuwald establishment derived, and this takes us up to the Silesian boundary, with Count Harrach's glass-works at Neuwelt (Harrachdorf), of the present day.

Such, in a few words, is the outline of the origin of the glass industry of Northern Bohemia, namely, in the spurs of the Iser- and the Riesengebirge, and it will at once be seen that its history cannot be separated from that of Silesia; and as the history was connected so were the glass-makers on either side of the Border by marriage.

To Schreiberhau also went one of the Preussler family, Wolfgang, then an aged man, from Bohemia, and built in 1617 a new glass-house on the Weissbach, where glass had been made, as we have seen, from the middle of the fourteenth century. Wolfgang was succeeded by his son Hans, who died in 1668, and his grandson John Christopher, who built another glass-house on the right bank of the Zacken. This last was followed by his son of the same name, and he, again, by his son George Sigismund, whose early death in 1751 placed the works in his widow's hands; owing to bad management they had to be sold to the highest bidder. In 1783 the new glass-house was again taken on by Carl Christian, son of George Sigismund Preussler, and a new furnace was set up at Martins-Heide, about a mile off. These were carried on by Christian Benjamin, son of Carl, who was the last bearer of the name so long associated with the Silesian glass industry, and by his death in 1848 the lengthy chain was broken. Of the three Preussler-built glass-houses only one is now carried on.

In the Isergebirge, near Schwarzbach, a glass-house was founded in 1651 by Protestant Bohemians driven out of their country by the measures taken against them after the Thirty Years' War. The first builder was Martin Scholze, a banished glass-maker. This establishment appears to have endured until the beginning of the eighteenth century. It should be noticed that this man merely crossed the border into Silesia, still keeping within the Riesengebirge range, for reasons of materials conveniently to be gotten. The furnace came to an end early in the eighteenth century. One of the Preusslers was glass-master here.

Through the activity of the Preussler family the glass industry was carried into the Waldenburg mountains in Silesia, offshoots of the Riesengebirge. A furnace was set up in 1661, and well supported locally. It took the name of Freudenberg, from a neighbouring mountain, and had considerable success until it was shaken by the War for the Austrian Succession (1740-1748).[1] In consequence of the bloody and futile Seven Years' War (1756-1763), which raged in its vicinity, it came to an end, and has never been reconstituted.

As to glass-making in the graffschaft or county of Glatz, in the Erlitzgebirge, nothing certain is known, but it is established by the building accounts of St. Adelbert's convent

[1] Full accounts of the War for the Austrian Succession will be found in Coxe, *House of Austria;* Koch, *Traités de Paix;* Flassan, *Histoire de la Diplomatie française;* Lacretelle, *Histoire des Français:* Ancillon, *Système politique de l'Europe*, etc. By the "Christian, universal, and perpetual Peace of Aix-la-Chapelle," signed 18th October 1748, which concluded the war, the Duchy of Silesia and the County of Glatz, which included the important glass-making districts, were by Article XXII. confirmed to the King of Prussia.

at Breslau, that about 1501 so-called "Waldglas" was obtained from Glatz, and payment rendered to the "domini de glotz." The oldest named glass-house was founded at Kaiserswald in 1656. It suffered in the Seven Years' War. A century later furnaces were set up in the neighbourhood at Schreckendorf, and in 1770 at Friedrichsgrund. Since then many more have been built, and towards the end of the century the use of coal as fuel was introduced. At the present day the country of Glatz takes the second place in Silesia as to extent and employment in glass-making.

Of the early glass-works in the spurs of the Sudetengebirge proper, known as the Reichensteiner- and Altvatergebirge, we again have cognisance through Anton Wale, about 1430: "Wiltu aber off eynen seyffen gehen in das hoche gebirge, so froge von dem Reyhensteyne off Fredebergk, doselbist ist alleyne eyn wegk, dy iij meylen off den Goldensteyn, wen du wirst komen bey iij firtil wegis von Fredebergk, do seyn czwe glasehuttin gewest, dornoch ge abir j firtil wegis vnd sieh dich denne vmbe off beyde seyten, zo findistu eyne wortczel . . . dornoch gehe obir den Bobinbergk, bas du komest an dy strosse, dy von Freyenwalde off den Guldensteyn gehet . . ."[1] From the topography here displayed the site of the "czwe glasehuttin" can only be Gurshdorf. Some interesting documents of 1536 show that these furnaces were then in being, and that they were sold in 1557. Nothing more is known of them.

At Jungferndorf, in 1509, Bishop Johannes Thurzo of Breslau, in a very interesting document in the vernacular,[2] confirms to Hans Flessig certain land for building a glass-house thereon, and endows it with waste or wild spaces where ashes could be burned and wood could be taken under certain conditions. The advantage to the district of such an industry in its midst is referred to. Again nothing further is known of this glass-house.

In 1636 Carl Bishop of Breslau granted to Elias Wilhelm leave to build a glass-house at Einseidel, near the Altvatergebirge, with a quit-rent for six years of 100 thalers, a chest of glass and nine *shock*, *i.e.* 540 wine and beer glasses. Wilhelm died in 1638, and the works subsequently passed through various hands and have an interesting history until the last quarter of the eighteenth century. In the middle of the seventeenth much hollow ware, "hohlglas," that is, bottles and drinking-glasses, as well as common sheet-glass and some looking-glass plates, were produced.

Nothing is known of glass-making in Upper Silesia before the end of the seventeenth century. It was practised in many places during the eighteenth century—at least to the number of twenty-five, not counting privileged houses—and first became of artistic importance in the time of Frederick the Great. From most of the Upper Silesian furnaces making white glass must have issued, *via* Prussia, a great part of the quantity of glasses which inundated the Low Country markets after the Peace of Utrecht in 1713. Many of these houses ran but a short course, and the industry steadily declined from the end of the eighteenth century. On account of its late establishment its history lacks the interest of other districts. The two glass-houses—Sklarka—on the Polish frontiers dating respectively from about 1670 and 1750 do not call for remark.

Those of Lower Silesia in the Oberlausitz are of much importance by reason of the

[1] *Chrysopoeie*, ut sup., Hs. R., 454, vellum page 4*b*.

[2] *Breslauer Stadtarchiv*, *Neisser Lagerbuch*, F. Neisse, III., 21*Z*, 1506-1518, p. 176. This document is printed for the first time by Herr v. Czihak, *Schlesische Glaser*, ut sup., p. 23.

16.—BOHEMIAN GLASS.

high quality of their productions towards the end of the eighteenth century. This was brought about by the very fine sand near Hohenbocka, and the convenience of fuel in the forests. At Weisau, at some time after the Thirty Years' War, a glass-house was founded which, together with that at Schreiberhau in the seventeenth and eighteenth centuries, stood at the head of the Silesian glass-works. Here were made drinking-glasses of all kinds in pure white metal, cut and gilt, besides the ordinary green vessels. The Rausche furnaces are first mentioned in 1724, and those at Kolzig forty years later, one of the places where soda from Spain was first used in Silesia, as it had been in England by Jean Carré, as long ago as in 1567. The great activity and increase which has characterised the glass industry of Silesia belong to modern times with which we are not particularly concerned. It received a large impetus through the introduction of coal as fuel about the beginning of the present century.

The origin and course of cut glass in Bohemia and Silesia have been spoken of in the English account; and the work of the Schwanhards and other able artists at Prague, Nuremberg, and Ratisbon referred to in relation to cut glass, and need not be repeated

FIG. 102. (One quarter.)

FIG. 103. (One quarter.)

FIG. 104. (One quarter.)

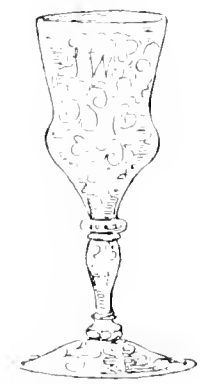


FIG. 105. (One quarter.

here. Deriving their style, early in the seventeenth century, from the cut rock-crystal shell-shaped vessels (Figs. 102, 103), the engraved and cut *rococco* decorations of the later Bohemian and Silesian covered cups and glasses—well suited to the taste of the time—were long unapproached. They have, of course, much less interest than the vessels of the earlier date which they displaced; but nothing finer of their kinds have been produced than the covered cups—of which an example in the collection of Mr. Fortnum is here illustrated (Plate 16)—trefoil or quatrefoil or octagonal in plan, or the fluted goblets, with ruby and leaf gold in their cut or twisted stems, and in the knobs of the covers (Figs. 104, 105, 106, 107, 108). These gradually replaced throughout Europe the finest of the old artistic glasses "façon de Venise," and took the lead in the general change of taste which advanced so rapidly early in the eighteenth century. To Bohemia and Silesia is due the credit of the movement. Their glasses were soon copied in a very poor style in Prussia, and in other parts of Germany, and a quantity made of a very inferior kind, more acceptable, perhaps, in the Rhine-land district and in the Low Countries because they were white. All these glasses gravitating westward, the old art glass industry of the Low Countries—already giving way to glass *à l'anglaise*—was, as we have seen,

soon crushed out. The roemer lingered until the end of the century. In Holland cut glass took a new direction with much success, but the growing excellence and the taste for English flint-glass early gave it a high place on the Continent, and the final superiority which it has since retained.

Ruby glass, well known to the ancients, was brought to perfection about 1679 by Johann Kunckel, a Silesian, and a distinguished chemist, while in the service of Frederic William, Elector of Brandenburg, at his glass-works on the Isle of Peacocks at Potsdam. The furnaces

FIG. 106. (One quarter.)

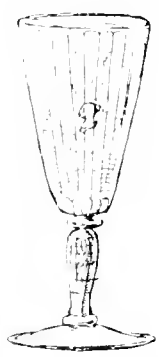


FIG. 107. (One quarter.)

FIG. 108. (One quarter.)

were removed to Zechlin after the death of the elector, and there continued with a great renown up to the middle of the last century. It is believed that Kunckel obtained his fine ruby by the use of gold instead of copper. The best examples are desirable objects of their kind, but many are of inferior colour, and the shapes of the Kunckel glasses are far from attractive, being usually no more than plain or fluted tumblers, a form as little suited as that of the Hedwigsgläser for the elaborate silver-gilt mountings that are often bestowed upon them.

The double and gilt Bohemian glasses may not be overlooked. In these a round-bottomed cup, sometimes of ruby glass, and exactly fitting the interior of a goblet, is gilded or silvered over its whole exterior surface. The subjects to be depicted—battle-pieces, landscapes, etc.—are then drawn through with a style or etching needle, after the manner of the disks from the early Christian *loculi*, hatched and shaded, and the superfluous metal cleared away. The cup, having a shoulder or rebate just below its rim, is then placed inside the glass, and fixed with clear cement and an almost imperceptible joint at the place of junction of the shoulder with the rim of the goblet, the sides of the latter being usually fluted to enhance the effect of the picture within. Varieties of such vessels are not uncommon; they differ greatly as to their merits, and are all too harsh and mechanical for any high art quality to be claimed for them. They were no doubt also made in Bavarian glass-works.

Another treatment was to deeply engrave the subjects on the inner glass and to paint and shade the intaglios, with most brilliant, if not a little vulgar, results. Many of the double glasses have been ruined by being placed in hot water. Tumblers and glasses with inserted ruby medallions backed with gilded or silvered decorations belong to the same class, and are generally after the middle of the eighteenth century. These methods are varieties of the "verre églomisé" of the late sixteenth and the seventeenth centuries.[1]

[1] An account of the process, and the derivation of the strange name, are given in Victor Gay, *Glossaire Archéologique*, 1887, vol. i., a work unfortunately incomplete. It is stated that the subjects were all burnt

XV.—BAVARIA.

With regard to glass-making in Bavaria, like that in Bohemia and Silesia it had its origin in the Forest Mountains, the Böhmerwaldgebirge, dividing Bavaria from Bohemia, and for the same reasons of convenience of materials. Again the history cannot be dissociated from that of the Bohemian and Silesian glass-works, because much the same glasses must have been made in all these countries until after the middle of the seventeenth century, when different lines were taken both as to form and decoration by each.

The commerce and industry of Bohemia stood in the closest relation with Nuremberg, and this, no doubt, gave an impetus to Bavarian glass-works early in the sixteenth century, and brought about the development later on of the drinking-glass and mirror industry on both sides of the Bohemian mountains. In consequence of the artistic influences of Nuremberg and Ratisbon the glass industry of Bavaria—or, speaking more closely, of the Upper Palatinate in Franconia—must have had quite as early an origin as those of Bohemia and Silesia; the making of mirrors and drinking-vessels advanced rapidly, and the industry became of great importance during the seventeenth and eighteenth centuries. The small mirrors blown in Bohemia and in the Franconian Palatinate were silvered and finished in Nuremberg, and many kinds of glasses found their decorators in that picturesque Free City of the Empire. At the present day the manufacture of glass of all kinds, particularly of looking-glass plates, is carried on, and to a large extent, in the ancient seats of the industry.

As early as in 1428 Onossorius de Blondio, an Italian, was established in Vienna, in the Kärntner Street; the glass-house "façon de Venise" set up in the Prater by Nicolas the Welsche in 1486 was certainly served by Italians, and was still working in 1563;[1] another was built in the time of Ferdinand I. (1557-63) at Weidlingen, near Vienna, "à la mode italienne." There is good reason for believing that many Italian glass-makers were working in Vienna during the seventeenth century. It is stated by Daru that, in the time of the Emperor Leopold (1658-1705), the Council of Ten issued orders that two runaway Venetians working at Weidlingen should be sought out and put to death.[2]

But we have no evidence of Venetian glass-makers being employed in Bohemia. On the contrary, Josepo Briati went from Venice to Bohemia in the middle of the eighteenth century, and having secretly learnt the processes of the crystal glass manufacture—then the most important on the Continent—returned and set up a Bohemian glass-house, first at Murano, and afterwards in Venice itself. *Per contra*, from Nuremberg Hans Nickel, Oswald Reinhardt, Joshua Reich, and Augustin Hirschvogel were sent as early as in 1531 to Venice in order to learn the Venetian processes—not Venetian fashions. This

in; those in colours certainly were not, whatever may have been the case with the late Greek gold-leaf work, in which the modern practice had its origin. The heads of foxes, dogs, etc., painted in crystal and glass intaglios in jewellery, so popular some years ago, belong to this class of art.

[1] H. Schuermans, *ut sup.*, Lettre X., p. 546.

[2] M. Santi, *Origine dell' arte vetraria in Venezia e Murano*, p. 25, has verified, from the archives of Venice, that a date of such an order touching a workman at Weidlingen is 1754, but it is improbable that it was ever carried out. Daru's statement (see footnote, p. 29, *sup.*) must be wrong.

they did, and in the following year set up a glass-house at Nuremberg.[1] Italians may well have been employed at furnaces in the Spessart, in the Schwartzwald, etc., at Lauenstein, in the Thuringerwald, at Karlshafen am Weser, at Zechlin in Brandenburg, and at many isolated open or private Court glass-works between the Rhine districts and the Forests, of which the memorial has perished. "Tous les Rois et Princes désiraient et affectaient avoir en leur royaulme cette science." Yet, while the Italians made their winged glasses pure and simple, as at Cologne and Dessau, it cannot be said that they deeply affected the developing course and style of the German glasses, or influenced their character to anything like the extent that they did those of the Low Countries.

George Agricola, Bürgermeister of Chemnitz in Saxony, 20 miles north of the Erzgebirge, and who had studied the art of glass-making during a long stay at Venice, gives much information (*De Re Metallica*, Basle, 1561) concerning the processes in use, and illustrates the productions by woodcuts. That of a German glass-house has great interest in showing the behaviour of the workmen, their instruments, the shape of the glasses at this particular date, and the glass-man "qui portat vitra ad dorsum" starting on his rounds, with his well-filled crate, his staff in his hand, and girded with a broadsword (Plate 17). There is nothing Italian about any of these vessels; indeed, as Mr. Nesbitt has pointed out, Agricola does not suggest that any fine glass wares were made in Germany, but refers to Murano as the source of "opera multa praeclara et admiranda."[2] This point will be returned to.

A glance at a number of sketches of Forest Glasses proper, the Waldgläser, such as the Reichs-, or Adler-, the Kurfürsten-, the Apostel-, the Zunft-, or Innungs-, and the Passgläser, whether in pale green, or gray approaching white, or the rare pale purple glass, show at once that there was no "Wälsch" influence in their forms, or in those of the great white glass roemers, and nothing Italian in their decorations save what was coincident with and attributable to the general effect of the Renaissance wave which was sweeping over Europe. Other German glasses, with high feet and open-work bases and rims, certainly show in their odd designs Italian forms grafted *tout bonnement* upon purely German ones; but these are exceptional; Low Country *évasés* tumblers were mounted upon similar bases. Those with perforated margins could only have been for flowers (Figs. 109, 110).

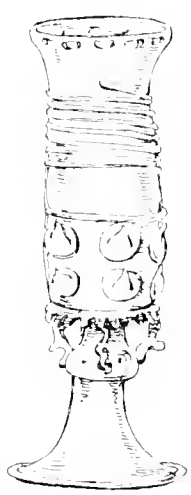


FIG. 109. (One quarter.)

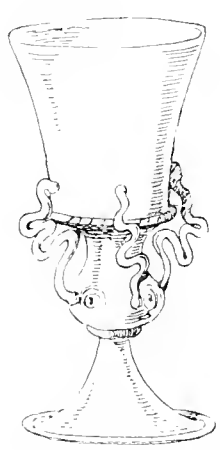
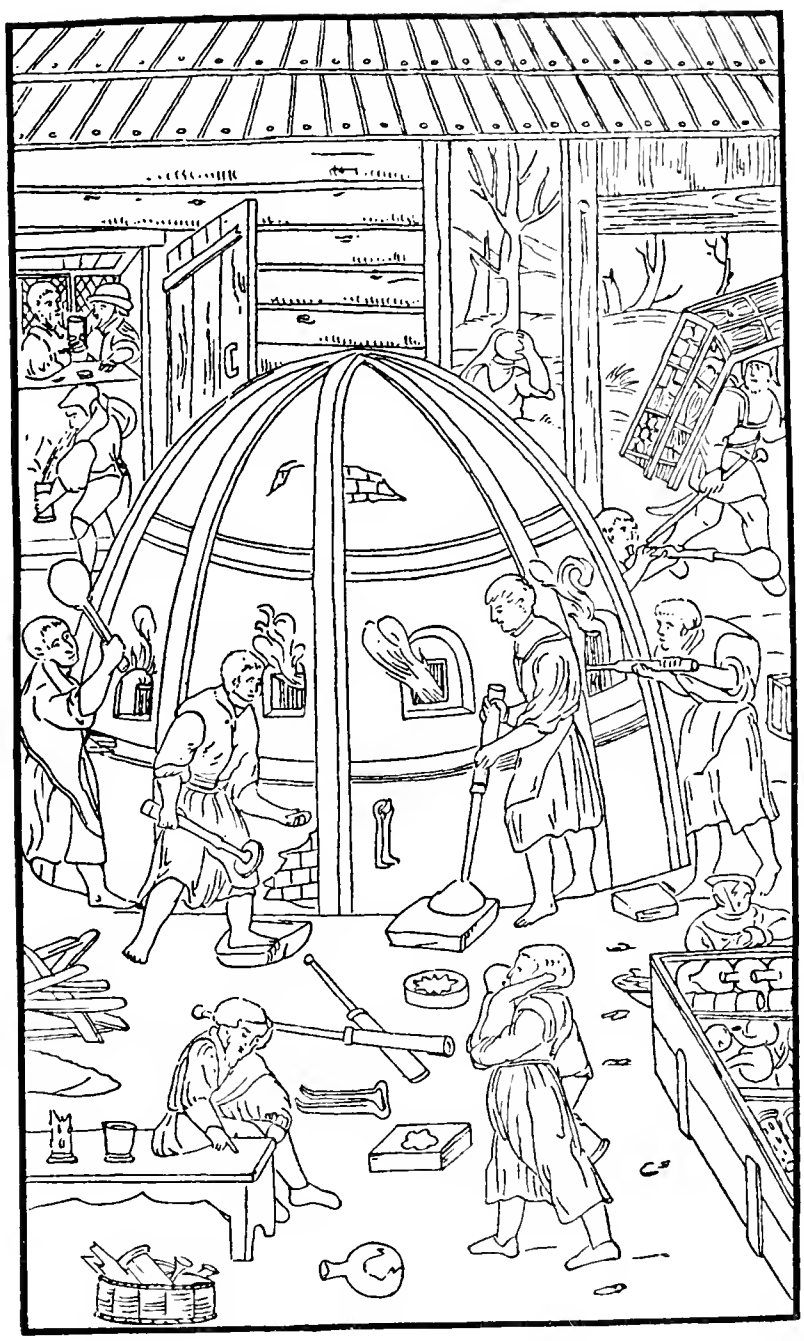


FIG. 110. (One quarter.)

Besides the large glasses just spoken of, there were the great cylindrical vessels decorated with painting in varnish colour, which is apt to flake off. Such glasses were too large and often too thin for convenient manipulation upon them of enamel painting at the furnace. They occasionally reach the height of 2 feet 6 inches, some being quite narrow, with lofty

[1] Gerspach, *ut sup.*, p. 259. The foundation of a glass-house under such circumstances and in such an art centre must have resulted in the production of vessels of far greater merit than those made at that time in the Forests, and anterior to the enamelled Humpen. Particularly, if we may assume that artists of the second rank like Virgil Solis, who designed goblets for silversmiths, also assisted the glass-makers.

[2] Introd., *S. K. Cat.*, p. cxxiv.



17.—GERMAN GLASS HOUSE.

domed covers, and high bases—mere "verres de parade" and not for use (Fig. 111). Many of the wider and more capacious ones are painted with portraits (Fig. 112), battle scenes, etc., excellently well done, or engraved with the diamond point with noble and armed men on horseback, ready "to ope the purple testament of bleeding war," allegorical and mythological figures, and so forth. Others, smaller, are stringed as Pass glasses simple, or decorated in enamel with the Ages of Man, graphic stages of drunkenness, armorial achievements, illustrations and rude poetry inculcating crude moralities, views of castles and villages, series of armorial bearings, etc. (Fig. 113). Certain rare Pass glasses are ornamented with figures of knaves from playing cards, painted in enamel on white grounds. In these the Laubbube and

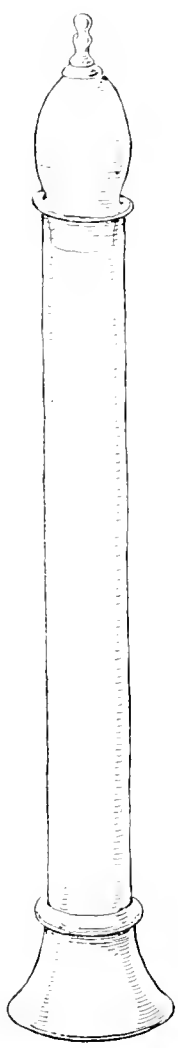


Fig. 111. (One quarter.)

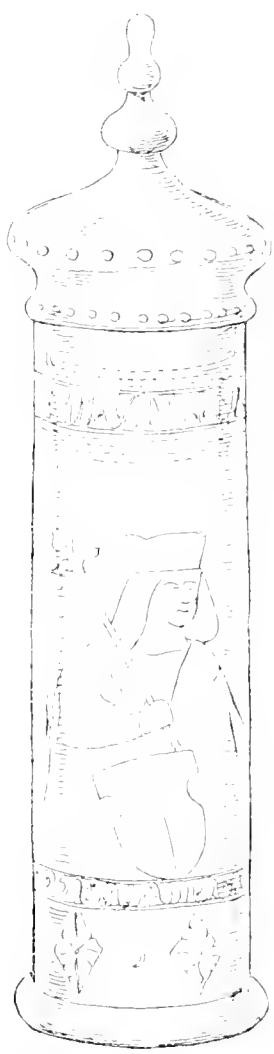


Fig. 112. (One quarter.)

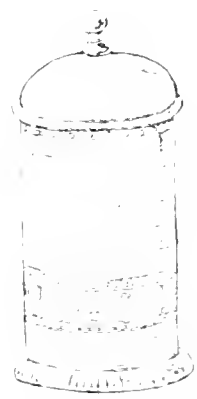


Fig. 113.
One quarter.

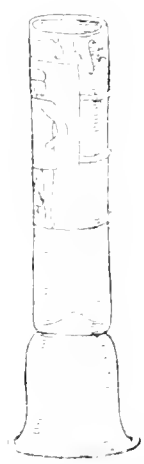


Fig. 114. (One quarter.)

the Eichelbube are signalised by a leaf or an acorn, with the motto for the one, "Ich fürchte mich nicht" (Fig. 114), and for the other, "Ich steche dich,"—expressions used in the course of the obscure game to which the figures belong. What relation, if any, the Pass glass divisions for drinking bore to the progress of the game it would be difficult now to say or even to suggest.

The whole of the large German glasses, of whatever shape, and whether decorated or plain, with covers or without, are comprehended under the term Humpen, *i.e.* brimmers. Under this name are also included the great roemers, the "verres de parade," the Pass glasses, and the Willkomm or salutation glasses—if of large size—which were offered to the guest

on his arrival, just as in England the Stirrup Cup was given to "spede" him on his departure.[1] Naturally a glass of any size or shape would have served for either purpose.

The French, by a misconception of the meaning of a Willkomm glass, and lacking the W in their alphabet, and the genius of their language having little sympathy with the letter K, have turned Willkomm into "Vidrecome." This coined word being retranslated into German becomes Wiederkomm, and having been adopted by the English has caused much confusion.[2] The Willkomm was now pushed aside, and it was considered, and unfortunately set down in many printed books, out of which it can never be eradicated, that a glass called a "Wiederkom" was one which was filled, passed round the table from mouth to mouth and *came again* empty —vidre, *i.e.* vide—to the host. It was a plausible and convenient definition, and thus any large Forest glass came to be talked of in England and France as a "Wiederkom" and a "Vidrecome" instead of a Humpen, and the real circulating cup, the ancient Passglas, was ousted from its high estate.

The Passglas, already alluded to,[3] was a tall cylindrical vessel, with a low or a high base which always runs up in the form of an inverted funnel—like the "kick" of a common black bottle—into the cylinder which is planted upon it. The name is derived from the measuring lines or "Pässe"—*Pas*, in Low German Mass. A constant feature of a Passglas is its more or less regular divisions into spaces by the external stringings, answering to the internal pegs in wooden and silver Scandinavian tankards, and, like them, for the ordering and controlling of the drinking. This was the vessel which was drunk out measure by measure round the table, and the manner of its use is clearly explained by the following doggerel upon a capital five-spaced Passglas richly enamelled with busts, flowers, etc., in the K. K. Oesterreich. Museum für Kunst und Industrie, at Vienna—

Vivat. In gesundheidt vnsser aller Inssgemein
Sollen die Päss aussgetruncken sein
Wär aber seinen Pass nicht dreffen Kan
Der soll den andern gleich auch hahn
Nun so will Ich sehen zu
Dass Ich den Pass bescheidt auch thu
Wie Es mein nachbar hadt gemacht
Da hien will Ich auch sein bedach Vivat.[4]

The Reichs- or Adlergläser (Empire or Eagle glasses) are the most striking of all the enamelled German Humpen, as much on account of the character of their decoration as for the quantity of heraldry which they exhibit. They vary but slightly in shape, being usually plain cylinders with low bases, sometimes with a cover, and occasionally with tapering sides and a handle, the bases and rims being ornamented in an elementary sort of way with gilding, dottings of various colours, imbrications, flutings, and bands, distantly resembling the decoration on early sixteenth-century Italian glass cups and tazzas.

The Imperial double-headed eagle is shown with wings displayed, each head is crowned,

[1] The slab of a full-sized brass of a civilian at All Saints, Stamford, is *semée* of small labels inscribed, ✠ me Spede, a very rare feature.

[2] Mr. Nesbitt has fallen into the same error in the *Slade* and the *S. K. Catalogues*. "Franzosen und Engländer haben aus Willkommen das sinnlose 'widerkom' gemacht."—Gerspach, *La Verrerie*, p. 274, quoted by E. v. Czihak, *Schlesische Gläser*, p. 72.

[3] See p. 68.

[4] Bruno Bucher, *Die Glassammlung des k. k. Oesterreich. Museums*, p. 91, edit. 1888. E. v. Czihak, *ut sup.*, p. 73.

and nimbed, and in the best examples it bears upon its breast the Crucifix (Fig. 115). Other Eagle Humpen have only the imperial orb of sovereignty in this position. On the wings are arranged in fourteen sets of four, according to an ancient precedent, the arms of the members of the German Confederation to the number of fifty-six, the name of each being above the shield. Round the rim of the glass is usually inscribed, with certain variations: DAS · HEILIGE · RÖMISCHE · REICH · MIT · SAMPT · SEINEN · GLIEDERN.[1] The date is generally at the back of the glass, the earliest that has been noticed being 1547, but they continued to be made until about the end of the first quarter of the eighteenth century, together with other large enamelled glasses.

The Kurfürsten Humpen followed the same shapes as the Adler glasses, and like them exhibit much vigour of treatment. The Emperor and the seven Electors are usually arranged in two rows under semicircular arches, and, mounted on white horses and habited in their robes of estate, make a brave and imposing appearance (Fig. 116). On the Apostel glasses of the same shape the representations are not so happy; they tend, indeed, to the grotesque, and one does not quite recognise why they should be depicted on drinking-glasses at all. Moreover, the figures of the early Christian leaders, with their lofty characters and homely emblems, did not submit to the picturesque handling which was associated with the pride of heraldry and the pomp and circumstance of worldly power, such as the old German artists so well knew how to depict. The Zunft- or Innungs-gläser were naturally very popular with the corporations and guilds for whom they were made, and the representations on them of the different trades are often very amusing and interesting. No less so are the inscriptions in the dialect of Swabia and Franconia. Glasses on which the Ages of Man are pictured extend "the days of our age" two decades beyond the allotted point of "labour and sorrow." The hundred years are divided by tens, and the three last and dismal stages of the life of man candidly inscribed "nimmer weiss," "der Kinder spod," and "gnad dir got"; and of woman, "wüst und erkalt," "eine Marterbildt," and "das Grab auss füllt."

FIG. 115. (One quarter.)

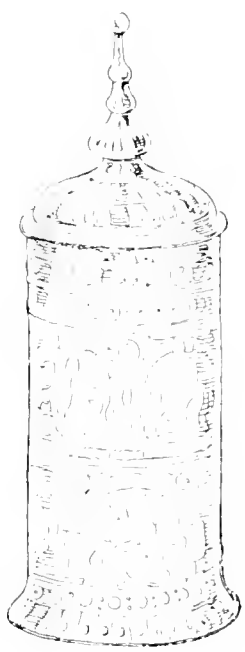


FIG. 116. (One quarter.)

The other large enamelled glass vessels, already enumerated, do not require special notice here, but as regards the whole of them it should be stated that the earlier examples exhibit considerable delicacy of execution. This must have been partially owing to observation of Italian enamelled glasses; but if so, and such excellence being so early acquired, it is a little

[1] The fullest version runs, *Godt behüdt und erhalt dass ganze Heilige Römische Reich mit Sampt seinen Gliedern all zu gleich*, as on an example in the Germanisches Museum at Nuremberg.

remarkable that the art should have steadily declined after the middle of the seventeenth century. It is true that the colours were always harsh and vivid, and the later work coarsely done; but taken as a whole, the enamelled German glasses have much vigour and originality, the heraldic shields and crests, the "chalumeaux," unknown in English heraldry, and other accessories of mantling, costume, etc., being capitally drawn. There is nothing of the kind to compare with these great Forest glasses in England, in France, or in the Low Countries. As to where they were made, tradition and illustrations on many glasses point to the Fichtelgebirge, and no doubt a large number were made in the neighbourhood of these mountains, and in the Thuringerwald, which runs out from them westward; but they must have been produced in other localities also.

Besides these enamelled glasses, large vessels of the roemer shape in white glass were made in the Forests, one in the Germanisches Museum at Nuremberg being as much as 1 foot 5 inches high, half an inch more than Lady Harvey's pale green Rhine-land example,[1] and perhaps the largest roemer in the world. In the same collection is a great waisted cylinder complete with no bottom, and engraved with the arms of a high ecclesiastic. These were all "verres de parade," show glasses, and, particularly that last named, not for use.

As to what extent the artists lent their assistance to the glass-makers and decorators we know very little. Nuremberg was a great inspiring centre, but no imagination can have been wanted for the designs of the cylindrical Humpen. With regard to their decoration, Augustin Hirshvogel is thought to have been one of the first who painted glasses in enamel in Nuremberg. He was, as we have seen, sent with three others from that city to Venice in 1531; dying in 1553, such work may well have been carried on by Nickel, Reinhardt, and Reich, who had also learnt the Venetian processes. Examples from the hands of these men would have been sent to the Forests, and copied by hirelings with the varied degrees of excellence exhibited. Thus the large number would be accounted for, as well as the mistakes in the tinctures of some of the heraldic shields. Albert Glockendon the engraver, also of Nuremberg, and whose engraved prints are rare, painted two glass cups for the Emperor in 1553;[2] and one is willing to think that Virgil Solis, again a Nuremberg artist, who made such a quantity of designs for goblets, aiguières, etc., for the silversmiths and metal-workers, would have also lowered his talents, if not to the forms of the glasses, at least to some of the decorations which appear upon them. He said of himself—inscribed it under his portrait—

> Mit meiner Hand ich erfurbracht
> Das mancher Künstler ward gemacht.[3]

The illustration of the ten Ages of Man occupied the attention of the early German engravers. For instance, Tobias Stimmer, born at Shaffhousen in 1534, well known by

[1] See p. 47 (footnote).

[2] Dr. G. W. K. Lochner, *Nachrichten von Künstlern und Werkleuten*, edit. 1879, quoted by E. Garnier, *ut sup.*, p. 269.

[3] A glance through a series of prints engraved after Virgil Solis, his *Biblische Figuren*, first published in 1560, for instance, shows how much he was indebted to Albert Durer; just as the prints after Martin Heemskerck indicate the influence of Michael Angelo, and figures in Rubens' pictures the indebtedness of that noble colourist to the great draughtsman of the human figure—"the Raphael of Holland."

the numerous woodcuts from his burin, and after his designs, drew on wood the ten Ages of Man, and a similar series for woman, in sets of two; these were engraved by an unknown hand, and have served or assisted in the delineation of the Ages on the Forest glasses.[1]

With respect further to Italian influence upon German glass-making, the Hungarian priest Mathesius about 1560, and other writers of the latter half of the sixteenth century, imply the inferiority of the German to the Venetian glass at that time. We are hampered, or rather inhibited, by the paucity of examples, but we meet with a few fantastic-shaped vessels, for the most part of random design, small, and poor imitations of Venetian. Similarly the German versions of filigree glasses are heavy in design and somewhat elementary in execution. We have, of course, the Kuttrolf[2]—French *guédouffle*—or sprinkling-bottle, with a single or a triple spirally-twisted neck for dispersing rose-water or other fragrant essence over the noisome rush-strewn floors; the vexir or trick glasses common to all countries; bear glasses; fountain glasses; plain *évasés* cups, mounted upon pierced and openwork feet, and other cups with loose glass rings of quite a different design to those of the Low Countries,[3] but inspired from the same sources; and, finally, the curious stringed and prunted humpen already mentioned, with openwork rims and set upon genuine Venetian bases with the water-bearing moulding or upper fold on the foot. The odd early eighteenth-century so-called Igel may be classified as a moderate trick glass on account of the difficulty of emptying it. It was a Breslau speciality, and is here depicted by the kind permission of Herr von Czihak, from his work on Silesian glasses.

FIG. 117. (One fifth.)

The conclusion we must come to is that Venetian art in glass did not hinder the general national current of German glass-making, and had but a moderate influence upon the native taste, affecting the smaller rather than the larger vessels, and that the imitation of large or elaborate Venetian glasses was not seriously attempted in the Forests. Nor have we in this regard, as we have in the Low Countries, any records to the effect that counterfeits were so well made "qu'à grand peine les maitres eux-mèmes sauraient juger la différence." The German genius was led in other directions—it is certainly not a matter for regret—and the Venetian influence died away before the end of the seventeenth century, Venetian art in glass also at that period falling into its décadence and, fashion decreeing, was soon itself to meet with a strong rival in the glasses from the forests of Germany and Bohemia.

Besides the enamelled humpen, so strangely different in every respect to anything that was produced in England, other great glasses of the same form were decorated with representations of triumphal processions, always popular in Germany, painted in grisaille, and sometimes winding spirally round the vessel: colours are often introduced. The glasses are frequently spaced as Passglasses and the pageants so divided into a series of scenes.[4]

[1] The division of human life into stages has been treated of during a period of at least two thousand years. Much information has been brought together on the subject by the late Mr. Winter Jones in the *Archæologia*, vol. xxxv. p. 167. The memorial brass in the form of a border, 7 feet 6 inches by 4 feet 5 inches, of Pieter Lausanne and his wife, 1487, 1489, at Ypres, gives a series of sixteen scenes. It is well illustrated by Mr. Creeny in his great work on the Continental Brasses.

[2] See p. 60.

[3] See p. 51.

[4] Every connoisseur of armour and costume who

The glass pocket-flasks or bottles, sometimes called snuff-bottles, and rudely decorated in enamels, generally in the primitive colours, were made as early as 1581, and were

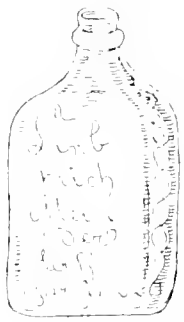


FIG. 118. (One quarter.)

FIG. 119. (One quarter.)

FIG. 120. (One quarter.)

continuously in fashion until quite modern times. They have their places in the general history, and a certain interest from being so often dated, like the mugs and "trifles," from Yarmouth and Lowestoft. Every one knows the figures of angular and gaudy shepherds, love-sick swains and bashful lassies; the brilliant and impossible flowers, the doves, the clasped hands of friendship, the bleeding hearts, and arrows. All these tokens differed but little throughout cultivated Europe during the eighteenth century, and in Germany the inscriptions run: "Lieb mich allein oder lass gar sein"; "Vivat mein Schatz"; "Ich liebe die treü die Falscheit Ich scheü" (Figs. 118, 119), and such-like trite sentiments. It is probable that many of these bottles were parting gifts to soldiers filled with strong waters, particularly welcome under the rude circumstances and appalling personal miseries of self-supporting Continental warfare in the seventeenth and the early part of the eighteenth centuries.[1]

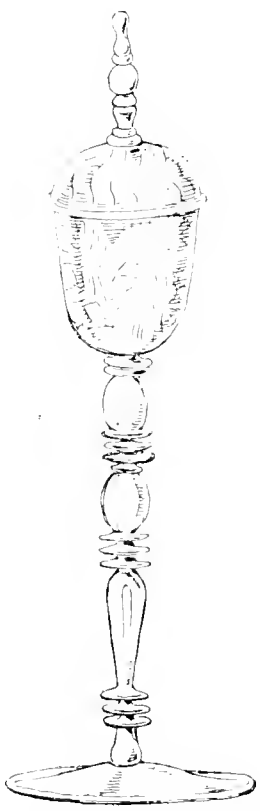


FIG. 121. (One quarter.)

While the enamelled humpen of the Forest glass-makers were advancing in the period of their deterioration, Johann Schäper came from Hamburgh and settled in Nuremberg in 1640. A number of glasses of a graceless shape have been preserved, admirably painted by him in dark brown with battle-pieces, landscapes, etc. (Fig. 120). Hermann Benchertt and Johann Keyll followed a similar style, with rather less success, painting quite up to the end of the seventeenth century upon cups of the same form, which have acquired the generic name of "Schäper" glasses, and of which examples may generally be found in museums in Germany. The large covered cups of Nuremberg make, with tall bulbed and annulated stems, are important, as much from their imposing appearance as from having been engraved by members of the Schwanhard family (Fig. 121).

has once seen them must retain in his mind a recollection of Hans Burgmair's *Noble Triumph of Maximilian*, and of the scenes in the *Pompe Funèbre* of Charles Quint, printed by Plantin. Nor will he forget such items as the figures of the harquebusiers, musketeers, and targiters in buff jerkins of Lant's *Sydney Roll*: or those of the dignified gentlemen walking two and two, in the illustrations of Monk's *Funeral Procession*. The training panoramas on the old glasses of a very strenuous and mystical people have like value for students, and faithfully depict many vagaries of processional costume of which we have no other records.

[1] Analogous to these objects are the quaint glass rolling-pins of Dibdin's time, parting gifts from faithful blue-jackets, and gaudily decorated and spirally inscribed with such reflections as "I love a Sailor," "Jack's the Lad," etc., the words unfolding themselves backwards and forwards as the cylinder was in use.

XVI.—FRANCE.

Glass-making in Roman times in Gaul, whether for domestic or for funeral use, must have been carried on in precisely the same manner as in other parts of the Roman Empire,—in a multitude of small furnaces where fuel and materials were conveniently at hand, the forms and character of the glass furniture for villa or grave being affected only by local conditions and substances. This is shown by the results of the excavations which have been made. The large quantity of glass vessels, many enclosed, as usual, in pottery urns, or of fragments, found at every Gallo-Roman station, villa, or cemetery, is evidenced by the collections in museums in France, such as at Boulogne, Rouen, Lyons, or Avignon, showing that in no part of the Empire was glass-making for general requirements more extensively carried out, the highest class of vessels only being procured from Rome.

It is certain also, from the testimony of the graves, and from documentary evidence, that the art survived the devastating influence of the northern tribes, and that extended glass industry continued through Frankish or Merovingian times; partaking, however, rather of the nature of a luxury than of the necessity of civilisation, which it was under Roman domination. This survival is clearly manifested by the cups and vessels—often closely allied in character to those of the same period which have been found in Britain—which the tombs have surrendered to the researches of antiquaries like the Abbé Cochet, M. Moutier, M. Lénormant, and others. These objects have already been touched upon, and are further discussed in the body of the present work.

Fortunatus, Bishop of Poitiers, died 609, speaks in his *Carmina*, l. xi. No. 10, of having received from the Abbess of Sainte-Croix at Poitiers glass dishes with birds prepared in them,[1] and it was to Gaul that Benedict Biscop sent in 675 for makers of glass for the windows of his church at Wearmouth. The action of Cuthbert, Abbot of Jarrow, in 758, in sending so far off as to Mayence for a glass-maker, simply implies that the craft was better carried on there than in Gaul, and it may well have been so at that particular time. However, it is evident that the art did not vanish in Gaul, as it so strangely appears to have done in Northumbria between 675 and 758, but continued, as there is reason to believe it long did in the south of England. Of this continuance in Gaul we have proof in the glass cups just alluded to, which have been recovered from Merovingian and Carlovingian graves, of much the same character as have been found on the hither side of the Channel. It must be remembered that the greater part of the glasses from Merovingian sepulchres are not of complicated or difficult manufacture, but are such as any glass-maker with moderate practice could produce; yet their characteristics are very distinct, and their general period cannot be mistaken. As with vessels of Anglo-Saxon times in England, difficulties at once present themselves on attempting to arrange Merovingian and Carlovingian glasses in strict order of date. No doubt the styles very much interpenetrated. A dark green bowl, said to be of the sixth century, stringed in yellow, and bearing in white

[1] Introd., *S. K. Cat.*, p. cviii.

letters the name EVTVCHIA, other stringed vessels, and a plate or dish—perhaps of the same character as those sent by the Abbess of Sainte-Croix to the Bishop of Poitiers—were found in a tomb at Grue, in Vendée, Poitou; all these were objects of a better kind than usual.

M. E. Garnier, in his excellent work, considers that the ancient Gallo-Roman glass-houses lost much of their importance from the second half of the fourth century, but that the greater number continued upon the old ground, their sites being recognisable at the present day by the names of such places as "La Verrerie," "Veyriera," "Verrières," "Voirrières," "Verrines," etc., formerly *Vitraria*, *Verreria*, *Verrerioe*, *Vitrinoe*, etc.;[1] convenience of wood fuel and materials would have caused this persistence. We have seen the same system of place-names in the region where Bohemian and Silesian glass-works had their origin,[2] and it obtained, but to a less extent and at a later date, in England.

It is probable that whatever glass cups were procured from the East before the first Crusade of 1095 came by way of the trade route to Limoges, and it is very doubtful whether any glass-works in France during the tenth and eleventh centuries—to go no later—could have produced vessels to which the descriptions "Cuppas vitreas auro ornatas duas . . . hanapum vitreum optimum unum" would apply, or could have fashioned a glass chalice such as the Emperor Henry II. (1002-1024) found fitting to present to the Abbey of Saint-Vannes at Verdun. Most probably these vessels came from the East.[3] A great falling off in glass-making appears to have taken place in the tenth and eleventh centuries, and not only in France, but in Western Germany also; in England it had seemingly died away altogether. The art was now about to be revived and to take a new and brilliant direction.

This great movement has been spoken of in the body of the present work in dealing with painted glass for windows in France and England, and it need only be mentioned here that a restoration, or rather rehabilitation, of glass-making in France appears to have been brought about by Byzantine influence at Limoges upon painted glass for windows. But there is neither documentary nor tangible evidence that such revival imparted a higher character to the drinking-glasses. We have, indeed, long since quitted the tombs, but we have not in this regard come into the light of day; nor was it until the end of the twelfth century that improvement took place in this direction in France. It may be added here that we are almost as badly off in the one country as in the other, in our lack of knowledge as to the kinds of glasses which were made side by side with the painted window-glass down to the end of the fifteenth century.

That there were glass-houses in the Vendomois in Orléanais producing "Voirres de Vendôme" is well known from the popular saying dating from the thirteenth century. Those of Provence, of the same period, were also well esteemed. An inventory of the Countess Mahaut d'Artois of 1316 has as follows: "Grant planté de poz de voirre et de voirres d'Aubigny, et de Provence, et d'autres païs, et de diverses couleurs, et bocaux et bariz, tous du temps de Monseigneur d'Artois, qui bien valoient 1 lib." These early Provence glasses are believed to have come from the furnace established by the Carthusians

[1] E. Garnier, *ut sup.*, p. 113.

[2] See p. 72.

[3] The same potentate sent to Odilon, Abbot of Cluny, "vas holovitreum valde pretiosum et Alexandrini operis tarte composium."—Garnier, *ut sup.*, p. 59.

in 1285 in the forest d'Orves, or, as M. Garnier thinks, in that existing from time immemorial at Reillane (Vaucluse), on the right bank of the Durance. This dispels the opinion that "le bon roi René" of Anjou introduced glass-making into Provence on his retirement into that province, much as his enlightened taste did towards the forwarding of the arts in the Midi during the fifteenth century.

Glass-houses existed in the Middle Ages at and near Paris. Charles VI. took much interest in their progress and visited the furnaces. The *Comptes royaux* of 1382, the king being then only fourteen years of age, contains the following entries: "A maistre Johan de Montagu, secrettaire, pour don fait par lui aux voirriers, près de la forest de Chevreuse où le Roy estoit alez veoir faire les voirres, par commandement dudit seigneur et de Ms. de Bourgogne . . . vi liv. iiij s."—"A Guillaume, le voirrier, lequel avoit présenté au roy, voirres, pour don fait à luy, le roy au Louvre . . . xiiijs. p."—"A Jehan le voirrier, de la forest Dotte, lequel avoit présenté au roy, voirres par plusieurs fois, pour don à lui fait . . . xiiijs. p."[1]

In all probability it was at a glass-house at Goult near Apt (Vaucluse), established by René for Benôit Ferro, an Altarist, that the glasses "moult variolés et bien peinct" were made, and which René sent as presents to his nephew, Louis XI. He is said to have frequently visited these works, and to have made drawings himself for some of the designs. Benôit Ferro was descended from a Venetian family which came to Altare in the early years of the fourteenth century to teach Altarists glass-making "façon de Venise." That such teaching was desired indicates the Norman origin of glass-making at Altare. Under the name of Ferry, the Ferro family spread in a remarkable manner throughout the Midi and to other parts of France, and "les élèves des Ferrys" were well known. This family of gentlemen glass-makers was ennobled in 1673, and became de Ferry of Provence. At the present day, as in the last century, nearly all the glass-houses in the province are in their hands.

Enamelled glass cups were also made in the sixteenth century in glass-houses in the Dauphiné, where works were established as early as in 1338, under heavy tributes to the Dauphin of Viennois; and in other parts to which Italian influence, as we shall see, naturally came as part of the great art movement which ran through Europe. But the scarcity of early examples of these objects, and their dispersion in widely-separated collections, make it impossible to localise strictly their origin, or, consequently, to gather from them much definite historical information.[2]

The glass-houses of Poitou were for a long period the most important. M. Fillon instances[3] in 1466 a delivery from the glass-works of La Ferrières to the Abbess of Sainte-Croix at Poitiers of twelve dozen glasses and one dozen ewers, against the liberty for the glass-makers to collect fern on her land. These were therefore "verres de fougère," and, as we shall briefly see, were made under Italian influence. The proximity of this province to Limousin, with Limoges as its chief town and the centre for centuries of window-glass painting and enamelling, naturally occurs to the mind in this relation.

[1] De Laborde, *Glossaire*.

[2] M. Garnier, p. 173, speaks of the difficulty of defining precisely the nature and the character of the old French glasses up to about the end of the seventeenth century, on account of the rarity of the examples which have survived.

[3] B. Fillon, *L'Art de Terre chez le Poitevins*, p. 202.

While the glass-works of Poitou, Provence, and Dauphiné were making a certain artistic progress—it must be granted at least from the end of the fourteenth century under the influence of the Altarists—the East was sending to France, as to England and Germany, her prized vessels and lamps already alluded to, imperfect in make, but beautiful in their enamelled and gilded decorations, the former to be mounted in gold and silver, for reliquaries or royal sideboards. They are usually styled in mediaeval times as "de Damas," "à la morisque," or "d'Alexandrie," and are now often spoken of in a general way as "Saracenic" and "Arab." The probability is that they nearly all derived from the ancient Phoenician glass-making district, of which Damascus was then the chief trading city—it was one of the favoured spots of the earth which flourished in all ages, and ever rose superior to sieges and devastations—and that the greater number were brought back as mysterious relics during the Crusades. An inventory of Louis of France, Duc d'Anjou, drawn up about 1364, contains the following entries:—

Premierement deus flascons de voirre, ouvrez d'azur, à plusieurs diverses choses de l'ouvrage de Damas.

Un autre flascon de voirre, ouvré d'azur de l'ouvrage de Damas, dont la garnison est de semblable façon.

In an inventory of his brother, Charles V., King of France, indited in 1380, we have:—

Un long pot de voirre ou aiguière, de la façon de Damas, le biberon garni d'argent. Trois pots de voirre rouge à la façon de Damas.

Une lampe de voirre, ouvrée en façon de Damas, sans aucune garnison d'argent.

Un très petit hanap de voirre en la façon de Damas.

Un bacin plat de voirre peinct à la façon de Damas, et une bordure d'argent esmaillée de France et de Bourgogne.[1]

In 1399 Charles VI. had:—

Une coupe de voirre peint à la Morisque.

Many of these valued objects having come westward in consequence of the Crusades, a taste for them was acquired which seems not to have died out until towards the end of the fifteenth century. In this respect the history in France follows much the same lines as in other countries. Venetian glasses were imported into Flanders soon after the middle of the fourteenth century, and at least as early as at the end of it to France, and they gradually took the place, in the estimation of princes, of those from the Orient.

We have seen that France was early involved in the great movement in glass-making "façon d'Italie"—specially in her case "façon d'Altare." From the geographical position of the country it was natural that it should be so, and that in the favoured land of a gifted artistic people the art should have a far more extended range, a better organisation, a more successful practice, and a longer course than in any other country in Europe. Moreover, a copious mass of information, documentary, historical, and topographical, has been brought together by French authors relative to the matter. This knowledge has been collected by the President Schuermans, added to from his own documentary researches, and commented upon and criticised by him. The results have the value conferred by the

[1] De Laborde, *Glossaire*.

insight into the subject which M. Schuermans' large studies in the Low Countries and elsewhere have given him. The advantage of having the isolated information for France brought together in this way is obvious, but so much has been thus amassed that it would be impossible under the limited scope of the present essay to do more here than call attention generally to the subject; in so doing the expedience of making use, with M. Schuermans' most friendly leave, of the latest collected information, and of quoting the authorities where most desirable, in an investigation that belongs to quite modern times, will be immediately apparent.[1]

It is certain that there was the desire in the south of France, before the time of King René (1409-1480), to make glasses after the Italian manner, and that in the last quarter of the fourteenth century, as is shown by a reference in a document of 1623, the glass-makers of Languedoc succeeded so well "que les ouvrages de Venise n'ont plus aucun avantage sur les leurs."[2] This was the consequence of the teaching of Italians, and thus it is shown that a considerable number of Altarist glass-makers was established in the Midi at least since the end of the fourteenth century. Further back than this with regard to the presence of Altarists in these parts of France we have not the warrant of documents to take us, but there is no reason why they should not have come a century sooner. From hence the Italians from Provence, Dauphiné, and Languedoc, and the natives who had learnt under them, spread in an organised way and carried their art throughout France, being constantly encouraged, privileged, and protected by the Crown, and continually working at glasses "façon de Venise" or "d'Altare," and at looking-glass plates, until the period of decay arrived, and the art fell out of favour, as in the Low Countries, but at a rather later time. Efforts were made, with small success, to contend against Bohemian and Flemish importations throughout the eighteenth century; long before the end of it, as in the Low Countries, the old artistic glass, yielding to "tyrant custom," was utterly effaced, and flint glass *more anglicano* and Bohemian crystal took its place in France.

It will now be proper to add to what has already been said with regard to the establishment of glass-making by Altarists in some of the southern provinces of France, and to follow this by a few notes upon the introduction and early course of Italian glass-making in the central and northern provinces.

Provence.—When that interesting personage King René of Anjou lost the throne of Naples, he retired to Provence and concerned himself greatly, as we have seen, in the glass industry. Much information has been brought together by French antiquaries upon mediaeval art in Provence, and drinking-glasses which served King René are stated by M. Fauris de Saint-Vincent to exist in collections in this province.[3] M. Garnier describes one

[1] The story of the movements of the Altarists in France and other European countries would have been far more complete and valuable but for a regrettable incident—the loss of the documents entitled *Deliberazione del Consulato dell' Arte vitria di Altare*, dating between the years 1498 and 1637. These registers contained the entries of applications and agreements for glass-makers from Altare, their names and destinations, the terms, and the periods of their stay in foreign countries. These important records were most reprehensibly consigned in 1864 to Canon Torterolo of Altare, then settled at Savone, who had undertaken to draw up a history of the glass-works of his native country. He had made a general beginning when he was suddenly carried off by fever in 1866. Since then all efforts to trace the MSS. have been unavailing. It recalls the vicissitudes of the Paston Letters. The information which M. Schuermans has gathered together on the subject must be only a tithe of what was contained in the papers which are so unfortunately missing.

[2] De Girancourt, *Nouvelle étude sur la verrerie de Rouen, et la fabrication de cristal à la façon de Venise*, p. 118.

[3] Fauris de Saint-Vincent, *Mémoire sur l'état du commerce en Provence au moyen âge*. Reboul, *Les de Ferry et les d'Escrivains, verriers provençaux*.

preserved at Aix. On the bottom of the glass inside, the Magdalen is painted kneeling at the feet of our Saviour, who is depicted against the side of the vessel; below the rim, in gold letters:—

Qui bien boira
Dieu verra
Qui boira tout d'une haleine
Verra Dieu et la Madelaine.[1]

Pictures in glasses, of a very different character, are mentioned by the jovial Brantôme.

Similarly from the Goult furnaces may have come several enamelled glasses dating from the end of the fifteenth and the beginning of the sixteenth century; these would also have been made under the influence of the Altarists. In accordance with the fashion of the time and country the vessels are generally decorated with figures and inscriptions. A glass in the Slade Collection,[2] $6\frac{1}{4}$ inches high, an important Provencal example of a few years before the middle of the sixteenth century, has on it a representation of a gentleman holding some flowers, with a scroll before him inscribed IE SVIS A VOVS, and of a lady holding a heart surmounted by an orb, possibly intended for a spherical padlock, with the inscription on a label in front MŌ CVEVR AVES. In a third compartment is a goat attempting to drink out of a narrow-necked vase, forming the rebus—bouc-eau. Below the rim, cleared through a gilded ground, is the inscription IE SVIS A VOVS IEHAN BOVCAV ET ANTOYNETE BOVC (Fig. 122). The name of Boucau is common still in Provence.

FIG. 122. (One quarter.)

M. Fillon, who has been untiring in his antiquarian researches in Poitou, has been fortunate in discovering and making known a few other examples of vessels of the same form and character as those of Provence. Such is a glass made for a member of the family of Pineau of La Rochelle, inscribed QVI EN CHRIST CROY EST HEVERVX—IVE PINEAV;[3] another, now in the Louvre, has a female bust, a shield of arms, and a label marked SVR TOVTE COHVSE; a third, in the Museum at Poitiers, has the inscription in relief VOVS SAVEZ BIEN QVE IE SEAI TOVT; and on a fourth in the same collection is the ancient and catholic proverb A BON VIN NE FAVLT POINT ANSEIGNE.[4]

Dauphiné.—This province had considerable and early importance as a glass-making district in France from its position with regard to Italy. The Altarists had long been

[1] E. Garnier, *ut sup.*, p. 117. This is a remarkable example of a glass specially prepared, and with surprising familiarity both in the decoration and in the appeal, for a curious accomplishment which long obtained throughout Europe, and is still popular enough in German universities. Allied to such pictures in glass were the silver "prints" in the bottoms of mazers. Pepys has recorded in his *Diary* that, when he visited the Alms-House at Saffron Walden, 27th February 1659-60, they brought him "a draft of their drink in a brown bowl tip't with silver"; this he drank and revealed the "print" at the bottom engraved with the Virgin and Child. This mazer still exists.

[2] *Slade Catalogue*, p. 136, with engravings.

[3] B. Fillon, *ut sup.*, p. 206

[4] *Slade Catalogue*, p. 136; E. Garnier, *ut sup.*, p. 122.

"The common saying is, the Iuy bush is hanged at the tauerne doore, to declare the vvyne vvithin. But the narrovve searchers of nyce and curious questions, affirme this the secreat cause. For that tree by his natiue property, fashioned into a drinking vessell, plainlye descryeth to the eye, the subtill arte of the vintner in mingling licours: vvhich els vvould lightly deceiue the thristye drinkers taste. And therefore, vvhere good vvyne is, according to the prouerb, nedeth no bushe at all. Euen so to praise it vvhose excellency vttereth it selfe, is but matter superfluous, and mere mispent tyme." —Richard Argall of thinner Temple, his proeme to Gerard Legh's *Accedens of Armory*, edit. 1568.

planted here when certain of their number were called into Provence by King René. Numerous "verrières delphinales" have been recognised, the earliest being that of Chambaran (Drôme) of 1338. In this year Guionet obtained from Humbert, Dauphin of Viennois, certain privileges for the exercise of glass-making in the forest, rendering in return, yearly, no less than two thousand four hundred and thirty objects, showing the great plenty of glass at that time. The document has much value as giving information concerning the glass vessels which were then in use:—"Verres en forme de cloches, petits verres évasés, hanaps ou coupes à pied, amphores, urinals, écuelles, plats, pots, aiguières, gottélfes, salières, lampes, chandeliers, tasses, barils, et bottes pour transporter le vin."[1] All this activity in Dauphiné was, as far as we know, previous to the coming of the Altarists. There was a glass-house at La Veyriera (Drôme) since 1484; at Salles in the same department, founded about 1500; at Les Verreries (Drôme);[2] at Châtonnay (Isère), and at several other places, in the sixteenth and seventeenth centuries, and all under the direction or influence of Altarists such as the Ferros, the Varaldos, and the Bormiolos.

Languedoc.—Members of the d'Azémar family established at Rouen in the seventeenth century affirmed, as we have seen by a document of 1623, that their ancestors brought the art of glass-making to such perfection at the end of the fourteenth century that their works were quite equal to those of Venice.[3] The d'Azémars and the de Virgilles were conspicuous Languedoc glass-making families, who, before their establishment in Normandy, Poitou, and Nivernais, carried on several furnaces in the departments of Gard, Tarn, Ardèche, etc. The de Virgilles also claimed an ancient ancestry in glass-making, and intermarried with the Bormiolo family. The extensive and important province of Languedoc certainly furnished a large proportion of the multitude of the gentlemen glass-makers, pupils of those of Italy. Many of them were working in Normandy at the beginning of the sixteenth century. M. Schuermans very truly says[4] that researches in local documents would not fail to show Altarists in full activity in Languedoc from the sixteenth century and earlier. So fruitful a study yet remains to be prosecuted.

In **Guyenne** Vincent Saroldo had authority from Henry IV., 4th May 1600, to make at Bordeaux and other places all sorts of enamel and glasses such as could be fashioned with the blow-pipe at the lamp.[5]

Lyonnais.—In an inventory of 1467 the following objects occur:—"Ung voirre cristallin, couvert, garny d'or, perché à jour, fait des lettres esmaillés, enlevés de gris et rouge cler, et au-dessoulx sont les armes de Monseigneur de Lyon."[6] These were sent by Charles de Bourbon to his uncle Philip le Bon, and may either have been made in Provence or in Lyonnais; the earliest information at present of a glass-house in Lyons "façon de Venise" is in 1511: one was in that year subsidised by the local authorities, and directed by Matthieu de Carpel; soon after there was a swarm of Altarist glass-makers at Lyons, which spread through France. Here we have the Buzzones in 1550, Marinos, Saroldos, and Bormiolos; and in 1597 Henry IV., on the establishment of a furnace at Melun by Jacques

[1] Le Grand d'Aussy, *Histoire de la vie privée des Français*, tome iii. ch. v. p. 220.

[2] Brun-Durand, *Dictionnaire Topographique du département de la Drôme*, p. 413, edit. 1891.

[3] See p. 91.

[4] H. Schuermans, *ut sup.*, Lettre XI., p. 726.

[5] *Ibid.* p. 698; and Lettre XII., p. 885.

[6] A. Pinchart, *ut sup.*, *Bulletin des Commissions royales d'art et d'archéologie*, vol. xxi. p. 359.

and Vincent Saroldo and Horace Ponta, declared concerning them:—ayant cy-devant et depuis longtemps tenu les fournaises et verreries de cristal à Lyon, ils y ont acquis une telle réputation à la perfection de leurs ouvrages que la plupart des verres dudit cristal desquels l'on s'est servi en nostre court et suitte et par tout notre royaume, ont été apportés desdites villes de Lyon."[1] These same men and their descendants reappear at Nantes, Nevers, and Paris, where their glass so far excelled that of Lyons that the latter city had to furnish itself from Nevers in the eighteenth century.[2]

There were formerly glass-works near the pine forests of the mountains de la Margeride between **Limousin** and **Auvergne**, and glasses "façon de Venise" exist which appear to have come from these furnaces. Further information concerning the two provinces has to be recovered.

Angoumois.—The master of the glass-house at Courlac (Charente) received payment in September 1465 from the seigneur de Vasles for "4 douzaines de vayres et sept acuères.[3] He is called Musset, and may have been one of the Mussi family of Altare. Long after, in 1627, Laurent Rossi and Jean Marie Perotto, an Altarist, set up glass-works in Angoumois.

Saintonge.—At Coiffard, near Oriolles (Charente), Bernard Buzzone—at the present day de Busson—"écuyer gentilhomme verrier," had a glass-house, and married, 1628, Marguerite Bouvier. From this alliance a family descended which obtained, in the persons of Jehan and Hélie Buzzone, an attestation of nobility from the judge and consuls of Altare. On producing their titles at Limoges in 1668 they were freed from further proceedings for usurpation of nobility. The last male representative of the de Busson family died in 1890. His son-in-law M. Delol states that scoriae and fragments of glass are frequently found on the site of the glass-works in the woods of the Coiffard estate.[4]

Poitou.—In this province were glass-works before the fifteenth century, as at Parc-de-Moulchamp (Vendée) and Bichat (Vienne), and there seems good reason for thinking that, in King René's domains in Poitou, some of the Ferro family were employed in the latter part of the fifteenth century in the departments of Deux-Sèvres and Vendée. Also at Courlac, Le Ferriere-Vandelogne (Deux Sèvres), and Rorteau (Vendée) glass-works "à l'italienne" were carried on in the latter part of the fifteenth century, and favoured by René. Girolamo Matteo directed a glass-house at Amailloux (Deux-Sèvres) in 1557; and at Largentière, in the same department, Fabiano Salviati, a refugee from the Venetian republic, set up a furnace in 1572. He was fortunate in finding a protector in the Comte de Lude, governor of the province, who issued a letter of protection—"Voulant gratiffier, favoriser et bien traicter Fabian Salviate, escuyer, gentilhomme de Myrane, païs de Venize, venuz, luy et sa famille, en ce païs de Poictou pour praticquer l'art de la verrerie."[5]

Members of the Saroldo family appear to have worked in glass-houses at Vendrennes (Vendée), and Vincent Saroldo turned his attention, as many Italians did in France, to the subject of enamels. Although there are no indications of further districts in Poitou favoured by Italians, the working out of the privilege accorded by Louis XIII. in 1627 to Jean Marie Perotto and Laurence Rossi is not likely to have been disregarded by those in whose interests it was granted.

[1] L'Abbé Boutillier, *Histoire des gentilshommes verriers et de la verrerie de Nevers*, p. 17.
[2] *Ibid.*, p. 102.
[3] Gerspach, *ut sup.*, p. 196.
[4] H. Schuermans, *ut sup.*, Lettre XI., p. 838.
[5] B. Fillon, *ut sup.*, p. 215.

Nivernais.—On account of its forests, Nivernais was favourably placed for glass-making, and the Altarists were further drawn there by the Dukes of Nevers of the House of Gonzaga, rulers of Monferrat, in which duchy Altare was situated. The confused history of the Nivernais glass industry has been well unravelled by Canon Boutillier. Nivernais drinking-glasses of the fourteenth century are spoken of, and some authors have gone so far as to give precedence to this province over Normandy as regards the antiquity of its window glass.[1] This seems excessive local patriotism.

Canon Boutillier has divided glass-making at Nevers into four periods. During the first, from the latter part of the sixteenth century, the chief glass-makers were Jacques and Vincent Saroldo and their nephew Horace Ponta, already spoken of under Lyonnais, and at Nevers; as elsewhere, the Saroldos were both glass-makers and enamellers.

During the second period—the first half of the seventeenth century—Ponta was sole master of the Nevers works, with many Altarists under him, until his death in 1646.

From 1647 to 1726 included the third period. Jean Castellano came from the works of the Bonhommes at Liège, and associated with Bernard Perotto his nephew. On his wish to retire, the Duke of Nivernais retained him with special favours; he died in 1670. Michael his son occupied his place until his death in 1721. By arrangement Jean Castellano employed a few Venetians before 1665, and with a subsidy of a thousand livres was able to recruit others, and to assist Colbert in his remarkable reorganisation of affairs. At this time, 1665, the glass and glazed pottery productions of Nevers amounted to 200,000 livres a year.[2]

The fourth period reaches far into the eighteenth century, where we need not follow it in any detail. At the present day glass-making in Nivernais is principally confined to the manufacture of bottles.

A notable feature in the Nevers history is that the glass-makers obtained from the Gonzaga dukes the erection of Nivernais into a peculiar department for the exercise of their art, and in 1661 they even obtained the monopoly upon the whole of the Loire, and from Nevers up to Poitiers. The institution of "départements verriers"—the cantonment of glass-makers—tended, indeed, to over-production, and exposed the masters to the caprices of the workmen, or, in other cases of independent glass-houses too near each other, the workmen were drawn or suborned by the masters from one to the other. Hence the custom as to glass-making "façon de Venise" in France of having such furnaces isolated from each other. For the manufacture of ordinary glass such precautionary measures were not necessary.[3]

Altarists were working in at least a dozen glass-houses in Nivernais up to about the middle of the eighteenth century. At Giverdy, in the latter part of the seventeenth century, we meet with members of the de Houx, de Hennezel, and de Bongars families from Lorraine; the two latter names are conspicuous in the history of glass-making in England in the sixteenth and seventeenth centuries. M. Schuermans gives a long annotated list of Altarists, as well as of Muranists, which, though necessarily incomplete, forms valuable material in a history of the art in one of its most important centres in France. Besides its glass-works, Nevers had a great and well-deserved renown for enamels in all colours, with which admirable figures and "plusieurs sortes de gentillesses d'émail propres à orner les cabinets,

[1] Savary des Bruslons, *Dictionnaire du Commerce*, vol. ii. p. 1387, edit. 1723.

[2] Piganiol de la Force, vol. x. p. 378, edit. 1752.

[3] H. Schuermans, *ut sup.*, Lettre XI., p. 753.

les cheminées et les armoires" were fashioned, as well as subjects with many figures, beautifully modelled "in the round,"[1] an art quite distinct from that of enamelling on metal plates.

Bourgogne.—At Châlon-sur-Saone (Saone-et-Loire), on 8th November 1584, a dozen glass-makers came under the notice of the civic authorities in their mistrusted condition of foreigners; the amount of wood which they might consume was accordingly fixed, and they were arbitrarily constrained to sell to the inhabitants of the town at the same price as to the hawkers.[2] A glass-house was carried on at Leffonds (Haute-Marne, Champagne), by Charles Massaro, gentleman glass-maker from Altare, in the middle of the seventeenth century. The States of Burgundy discharged him from certain fiscal duties over which they had control in this part of Champagne. Other Altarists in Burgundy were members of the Saroldo family, working up to the end of the eighteenth century, besides de Virgilles from Languedoc, early the pupils of the Altarists, like their compatriots the d'Azémars. At Montcenis (Saone-et-Loire), in the latter part of the century, glass vessels, etc., were made which had a certain credit, particularly in the Russian market.[3]

Champagne.—A privilege was granted in 1577 to certain native glass-makers;[4] among the names occur those of Bigault and Thiétry, which are also met with in the English story; these and others were common both to Lorraine and Belgium, the French province being the seed-plot.

We have seen that Gridolphi complained in 1607 of the competition of the glass-works of Mezières (Ardennes);[5] he declared in 1611 that they had come to an end. At Charleville in the same department it has been shown by laborious researches into documents, patiently undertaken by M. Laurent, archiviste of the Ardennes, that a certain Pierre de Esbarar—a name sounding rather Spanish than French or Italian, but meant for Esberard—carried on glass-works until after the middle of the seventeenth century. But unfortunate gaps in parish registers restrict the knowledge as to the presence of Italians, save in the instance of "Paul François Italien"—perhaps a Francisci.[6] At Sainte-Menehould, Châtrices, Vienne-le-Château, and Vieux-Étangs (all in the department of Marne), the Massaros, Ferros, and other Altarists were interested in glass-works during the seventeenth century, and much information has been brought together by M. Schuermans concerning the industry during the following century; this can only be alluded to here.

Anjou.—King René also encouraged the glass-makers in his dominions of Anjou, among others, at la Roche-sur-Yon. Angers (Marne-et-Loire) was one of the cities in which Vincent Saroldo was privileged by Henry IV., 4th May 1600, "y faire toutes sortes d'ouvrages de verre, comme il s'en faisait à Venise et autres lieux, sans brûler bois ou charbon."[7] This refers to enamelling and such works, which could be made with the blow-pipe at the lamp.

Orléanais.—Allusion has been made to certain glasses in Vendomois in the Middle Ages.[8] Between the thirteenth and the seventeenth centuries is a wide step, but it is not

[1] H. Schuermans, *ut sup.*, Lettre XII., p. 889; *Dictionnaire de Trévoux*.

[2] *Ibid.*, Lettre XI., p. 656, information from M. G. Millot, archiviste at Châlon.

[3] Louandre, *Histoire de l'industrie française et des gens de métier*, vol. ii. p. 167.

[4] H. Schuermans, *ut sup.*, Lettre XI., p. 672, original document, bundle 2109, p. 238, of *Conseil des Finances*, among the Brussels archives.

[5] See p. 38.

[6] H. Schuermans, *ut sup.*, Lettre XI., p. 673.

[7] Gerspach, *ut sup.*, p. 200; Monteuil, *Notices historiques sur les anciens rues de Marseille*, p. 115; Reboul, *Notes historiques*, p. 3. The other privileged cities were Paris, Orléans, Rouen, Caen, Poitiers, Bordeaux, Toulouse, Lyon, and Marseille.—H. Schuermans, Lettre XII., p. 885.

[8] See p. 88.

until 1672 that information presents itself. Before this time Bernard Perotto had obtained from his uncle Jean Castellano the benefit of the monopoly granted in 1661 for the supply of glasses throughout the whole length of the Loire, and from Nevers to Poitiers. In 1672 privileges were completed by which Perotto obtained the concession or patent for twenty years to make at Orléans all sorts and kinds of glass. In 1691 he is said to have discovered "le secret de contrefaire l'Agathe et la Porcelaine avec le Verre et les Émaux."[1] There never was much secret about these things. "Il a pareillement trouvé le secret du Rouge des Anciens." This had also been "discovered" by Kunckel about 1679,[2] and England was not without her claimants in this direction. Perotto was the first to make use, before 1666, of anthracite for the furnaces, and there remains no doubt now that he was the inventor of the process of casting glass in plates, commonly attributed, even at Saint-Gobain at the present day, to Louis Lucas de Nehou.[3]

Bretagne.— It is perhaps an open question whether we meet with more Altarists in this province on account of the attraction to the region of their origin, or because the question has been better studied in this district than elsewhere. Thanks to the labours of M. Vaillant de la Fieffe for Normandy, and of Canon Boutillier for Nivernais, a great deal of information has been collected which serves also for Brittany.

At the latter part of the fourteenth century the only glass-makers known are the Esquires of Meigret, masters of furnaces at Belligné and Marteaux.[4] In the sixteenth century numbers of glass-makers from Altare settled in Brittany, particularly in the Nantes district. Many took out letters of naturalisation which were registered at the Nantes Parliament. Such were the families of Bianchi, Saroldo, Massaro, Bormiolo, Buzzone, Marino, Ferro, and other well-known Altarist names. These men continued during the greater part of the seventeenth century, the Saroldos, indeed, remaining at Nantes for more than two centuries. There is the usual difficulty in identification caused by the repetition of the same Christian names.

In the Loire Inférieure, glass-works were carried on by Altarists at Machecoul, Fercé, Le Héric, Le Croisic, Riaillé, and Couéron, near Nantes; Rouffigné is still working, and is probably of Italian origin. In Ille-et-Vilaine, at Laignelet, Italians were making glass in the sixteenth century, and the furnaces are carried on at the present day. There were formerly glass-houses at Saint-Magan, near Saint-Malo, and at La Fond (Charente Inférieure) a royal glass-house was set up in the eighteenth century.

[1] A. du Pradel, *Le livre commode contenant les addresses de Paris, et le Trésor des Almanachs pour l'année bissextile* 1692, vol. ii. p. 44; E. Garnier, *ut sup.*, p. 169.

[2] See p. 78.

[3] "Ainsi en 1688 de Nehou, associé à A. Thévart, invente le procédé de *coulage* des glaces," *Conférence faite à la Société de Géographie, à Laon;* "Étude sur Saint-Gobain," par J. Henrivaux, Directeur de la manufacture des glaces, p. 12. M. Garnier says: "Ce qui est certain, c'est que c'est à Louis Lucas de Nehou qu'est dû le procédé du *coulage*" (*Histoire, etc.*, ut sup., p. 329).

A note upon the origin of so important a manufacture may be appropriately added here. In a letter of confirmation granted by Louis XIV. to Perotto, M. Henri Havard tells us that it is recited that in 1662 and 1668 leave had already been given to the petitioner to make all sorts of glass, and it continues: "Néantmoins comme cette nouvelle invention qu'il a trouvé depuis ce temps-là, de faire couler le cristal en table comme des metaux, paroist si extraordinaire qu'elle semble ne pouvoir être entendue ni comprise sous des termes généraux et qu'il est nécessaire d'en faire une déclaration speciale et précise, pour oster tout prétexte à ceux qui voudroient troubler ledit exposant dans son dit privilège, c'est ce qui l'oblige à recourir à notre autorité, à ce qu'en confirmant et expliquant le susdit privilège, il nous plaise de le faire jouir du fruit de ses travaux et des dépenses qu'il a faites pour ses recherches curieuses qui peuvent être utiles pour les ornements publics."—H. Schuermans, *ut sup.*, Lettre XI., p. 804.

[4] Dom Lobineau, *Histoire de la Bretagne*, col. 1614.

Ile de France.—We have seen that glass-houses existed at and near Paris in the fourteenth century, but it is not until 1551 that we have knowledge of Venetians in the province. In this year Teseo Mutio, a native of Bologna, but of Altare origin, was authorised by letters patent of Henry II., to the exclusion of all others in France, to set up a furnace at Saint-Germain-en-Laye (Seine-et-Oise), and to make "verres, myroers, canons, et autres espèces de verreries à la façon de Venise."[1] The works of Mutio were signalised by the king as "trouvés de mème beauté et excellence que ceux qu'on souloit apporter de Venise."[2]

As in London, the sites of old glass-works in Paris are recognisable by the names of streets mentioned as early as in 1407 by Guillebert de Metz.[3] We again meet with Jacques and Vincent Saroldo, and Horace Ponta, who had under Henry IV. the exclusive privilege of glass-making for thirty lieues round. In furtherance of this concession they attracted numerous Altarists—Buzzones, Bertoluzzis, Pontas. During the seventeenth century it is difficult to disentangle the history of glass plates from that of drinking-vessels; both manufactures were encouraged by Colbert, and extraordinary means were taken to attract and retain the Italians. Money was advanced to them, taxes waived in their favour, and free letters of naturalisation granted.[4] Thus eighteen gentlemen glass-makers were enticed from Murano to Paris, and became the subjects of much interesting diplomacy. They were "proclaimed" at Venice, and some of them went back fearing the consequences. Others who remained were not quite satisfactory. They are spoken of in 1666 as "Les ouvriers vénitiens ne veulent rien enseigner aux Français, et quand celui que les mène est malade, tout s'arrête; en sorte que tout dépend non seulement du caprice de ces messieurs, mais même de leur vie et de leur santé."[5] However, their services were not much required, for Colbert wrote to that effect to the Venetian Ambassador in June 1670. M. Schuermans gives a sketch, which is typical, of the wanderings of one Paolo Mazzolao, a fugitive from Venice who, as "Monsu la Motta," roamed from country to country during a quarter of a century, working at glass in London, Liège, Maestricht, and Normandy. He reappeared at Orléans in 1672 as Paul Massolay de la Motte, and he, or his son, is spoken of in 1691 as being about to open an establishment under the broad seal in Paris for enamels and glass like agate and porcelain.[6] The porcellaneous character of some of the glass of this particular period is suggestive. The new works were situated between the modern Place de la Concord and the Trocadero. Another venture in artistic glass in Paris was the manufacture allowed by letters patent granted in 1699 to the Sieur Launoy de Bourmont, but owing to opposition not established until 1709. The letters patent have great interest on account of the details they give concerning glass-making in Paris and in the provinces, information so much wanted of this period for England. Glasses engraved and chiselled in intaglio and in cameo, and sculptured busts and bas-reliefs are spoken of; others—cut, facetted, and engraved[7]—belong to the new style then coming into fashion.

At Fontainbleau (Seine-et-Marne) Antoine Clèricy—who was installed in the Tuilleries under Marie de Médecis, with lodgings, furnaces, and ceramic workshops—had leave by

[1] H. Schuermans, *ut sup.*, Lettre XI., p. 698.
[2] *Ibid.*, Lettre III., p. 16.
[3] Sauval, *Histoire et recherches des antiquités de Paris*, vol. i. p. 123.
[4] Le Vaillant de la Fieffe, *Les Verreries de la Normandie*, pp. 397, 533.
[5] H. Schuermans, *ut sup.*, Lettre XI., pp. 710, 713.
[6] *Ibid.*, do., p. 714.
[7] *Ibid.*, do., p. 719.

royal letters in 1641 to establish a glass-house at the end of the Parc de Monceau, with full liberty of manufacture and sale. He is described as "escuier, maitre de la verrerie royale et nostre ouvrier en terre sigillée." He succeeded well and employed Italians, among them a Saroldo.[1]

At the beginning of the eighteenth century a glass-house at Sèvres (Seine-et-Oise) made drinking-glasses and small objects "façon de cristal." It is said to have supplied all Paris. Zoude of Namur[2] towards the end of the century prided himself on supplying Paris with his productions; apparently the taste for glasses "façon de Venise" had not yet died out in that city.

Lorraine.—Although the chief works of the Lorraine glass-houses were general table glass, bottles, and window glass, it is recorded that in the district of Clermont (Meuse) in the sixteenth century "petits et menus voirres, grand miroirs et bassins qui ne se font ailleurs dans tout l'univers," and "plusieurs sortes de voirres fins à la semblance de christallins, et d'autres voirres communs, autant que l'on sçauroit soubhaicter" were made. From Pont-à-Mousson (Meurthe) came a certain crucifix as large as a man's thigh, upon a cross of glass—"accoustré si richement de couleur, que l'on estoit aveuglé de la beauté et lueur."[3]

The privileges of the Lorraine glass-makers date from René of Anjou who, through his son Jean de Calabre, granted them a charter in 1448, and in their joint names confirmed, in 1469, the rights, etc., which the gentle glass-makers of Lorraine had enjoyed "de tous temps passés."[4] The principal names in the early documents are Thiétry, Hennezel, Bongars, Houx, Bigo—spoken of in the body of the present work in their connection with England—Condé, Sandrouin, Bonnay, etc., and such well-known Altarist names as Bormiolo, Saroldo, Mazzolao, and others.

In 1603 Charles II., Duc de Lorraine, took steps to introduce the manufacture of "verres de cristal" façon de Venise, as did also his successor Henry. By the terms of certain contracts with Italians, the Bonhommes in 1666 sent Benoit Marius joined with Jean-Tilman d'Heur to work in an old glass-house at Verdun, and they introduced glasses so made, as they did those from their works at Maestricht, Liège, and Bois-le-Duc, into the Low Countries, and in very large quantities.[5]

There was a glass-house at Saint-Quirin (Meurthe) before 1530, making mirrors then and long after. It changed its fashion in the eighteenth century, and became "Royal" in 1753, when it took to making table, Bohemian, and crystal glass. The furnaces at Baccarat, founded in 1765, have been spoken of already.[6]

Picardie.—A glass-house was established at Charles-Fontaine (Aisne), not far from the castle of Saint-Gobain, at the beginning of the fifteenth century. It fell under the protection of Marie de Luxembourg, great-grandmother of Henry IV., until her death in 1546. Its privileges were confirmed by Charles IX. and Henry III., and by Henry IV., who duly became lord of Saint-Gobain in 1589. The glass-makers held now *in capite* by the yearly service of the delivery to the king of a hundred and fifty drinking-

[1] H. Schuermans, *ut sup.*, Lettre XI., p. 721.

[2] See p. 41.

[3] *Voleyr de Sérouville*, and *le Président Thiery Alix*, quoted by Beaupré, p. 23; E. Garnier, p. 160, etc.

[4] This interesting and important document has often been reproduced; it is given by M. Garnier, p. 157.

[5] H. Schuermans, *ut sup.*, Lettre XI., p. 733.

[6] See p. 42.

glasses; this in England would have constituted a tenure in free socage by petit serjeanty. The furnaces were in the hands of the De Brossards, who introduced Italians, and about the end of the seventeenth century an alliance between a De Brossard and Peter Massaro, an Altarist, brought about a change in the direction, and great beauty and taste in the objects produced, some of them being of a porcellaneous character which would stand the fire. M. Schuermans has worked out a careful account of the descent of the Massaro family, and the connection of some of them with glass-houses at Liège. Other furnaces in Picardie making bottles, and not artistic glass, need not be spoken of here, save that of Quicangrogne (Aisne), where a glass-house is said to have been established in 1290.[1] The De Colnets were concerned here as early as in 1467.

Normandie.—That Roman glass-furnaces were at work in Lugdunensis Secunda during the first centuries of the Christian era is beyond question. And the continuity of glass-making in the same district from Roman times to the eleventh century has already been spoken of,[2] as well as the migration of glass-makers from Normandy to Altare at the latter period. The support which the proposition of such foreign origin obtains from local tradition, the physical types, and the peculiarities of the language of the "Monsù" of Altare, as contrasted with the characteristics of the native "Paesani," is overwhelming.[3] The Flanders of the tradition must, however, be taken in that general denomination of the Low Countries in ancient times, and, in the present case, narrowed down to those parts of it nearest to France. In this sense a certain number of glass-makers from "French Flanders" may well have joined with those from Normandy—a boundary in such a case being a mere accident—from whence, bringing down tradition to its just value, the bulk of the emigrants must have proceeded; and probably a few from the parts of Brittany adjoining the Duchy. A district which could provide and dispense with the services of a not inconsiderable body of glass-makers in the eleventh century, and which had supplied "makers of glass" to Northumbria in 679, is not likely to have lacked them during the intervening period. Yet it is doubtful whether the Norman emigrants to Altare had been at all affected before their departure by the art movement at Limoges in the tenth and eleventh centuries. Moreover, Venetians came from Murano itself to Altare early in the fourteenth century to instruct the strangers in the Venetian practices.[4]

The names of Ragenulf and Baldric, glass-makers, occur in a charter of 863 relative to the abbey of Saint-Amand-en-Pevèle;[5] an account of 1302, under Philip-le-Bel, regulates the payment of workmen charged with cutting fern in the woods of Normandy—this shows the light quality of the glass—the "verre de fougère" so often alluded to in French poetry—that was then being made;[6] and a document of 1333, of Philip de Valois, grants the privilege of making panes of glass to a Norman named Cacqueray.[7]

Four families took the first position in the Normandy glass-works—the de Caqueray, the

[1] Matton, *Dictionnaire topographique du département de l'Aisne*, p. 44.

[2] See p. 87.

[3] H. Schuermans, *ut sup.*, Lettres III., p. 27; XI., p. 777.

[4] See p. 89.

[5] Martène et Durand, *Amplissima collectio*, vol. i. p. 168.

[6] Fern burnt to ashes was largely used in France down to the end of the last century to furnish the alkali or potash for the manufacture of ordinary and extremely light glass. The term "un fougère" was synonymous with "a drinking glass," and as such was employed by the poets. Good accounts of "verre de fougère" are given by M. Schuermans (Lettre VI., p. 238), and by M. Garnier, p. 130, and the subject is fully discussed in Merret's *Neri*, edit. 1662.

[7] Le Vaillant de la Fieffe, *ut sup.*, pp. 4, 457.

de Bongars, the de Brossard, and the Le Vaillant. We have already met with these names associated with Italian gentlemen, and it will be understood that wherever the latter artists were established there also were native glass-makers working with them, naturally on the friendly terms which would prevail between the one set of persons desirous of learning as much as they could from the other, save under special circumstances.

As an example of the curious difficulties which arise, a question presents itself as to whether the Normandy family of Barniolles springs from that of Bormiolo which came into France from Altare at the end of the fourteenth century, or was it of Norman purity, always remaining on its own ground?

At Rouen, Saint-Sever (Seine Inférieure), Vincent Buzzone and Thomassin Bertoluzzi, Altarists in two generations of descent, but of Venetian origin, had privilege to set up a glass-house "façon de Venise" in 1598, being authorised by Henry IV. to make "verres de cristal, verres dorés, esmaulx et aultres ouvrages qui se font à Venise et aultres lieux ès pays étrangers, et aultres qu'ils pourront de nouveau inventer, avec defenses à tous aultres verriers d'établir dorenavent aucune autre verrerie a vingt lieues à l'entour, excepté pour les verres communs, dits verres de fougère."[1] Just within the year they left to join Saroldo in Paris. In 1605 the industry was resumed in Rouen by François de Garconnet from Provence, who introduced many strangers, among them Bormiolos, who excelled in their looking-glasses. Antoine Montchrestien, de Vatteville, in his *Traité d'économie politique*, 1615, vol. i., "Des Manufactures," tells us in effect what he actually witnessed going on in Rouen:—"Grâce à nos deux ou trois milles gentilshommes verriers, la plupart élèves des verriers italiens, les Français ne boivent plus dans des tasses de poterie, mais dans des tasses de verre, teint en toutes sortes de couleurs, en bleu, en jaune, en vert, en rouge, faconné en toutes sortes de formes, en nef, en cloche, en cheval, en oiseau, en eglise."[2] Thus the custom of fashioning glasses of bizarre shapes obtained in France, having been brought from Venice.[3]

Garconnet was followed at Saint-Sever, Rouen, by the d'Azémars, Jean and Pierre, who obtained letters of perpetual concession in 1635, for making crystal glass, which were fruitful of legal proceedings later on. These letters declare that from the glass-house of Saint-Sever came "de plus excellents ouvrages que d'aucun de ce royaume." The d'Azémars were joined by de Virgilles and other Italians who produced excellent crystal glass; it is very doubtful whether the French learners could have then dispensed with their Italian teachers. They continued, indeed, at Rouen until the furnaces were extinguished about 1760.

Pierre d'Azémar founded a glass-house at La Guyonnée (Eure) in 1626, and another at La Caule-Sainte-Beuve (Seine Inférieure) in 1634, where Jean Bormiolo and at least two of the de Virgilles worked respectively in 1646 and 1666. Several rival glass-houses in the departments of Eure, Orne, Calvados, and Manche were proceeded against by the d'Azémars in virtue of their perpetual concession, and some of them were thereby much hampered as to their productions, or closed in consequence. However, the defendants obtained certain privileges under Royal Letters in 1650 and 1659; so a prejudicial monopoly for the making of crystal glass in Rouen alone was broken down, and many new crystal glass-houses

[1] Le Vaillant de la Fieffe, *ut sup.*, p. 185.

[2] Monteil, see Louandre, *ut sup.*, vol. ii. p. 26.

[3] See p. 29.

sprang up, particularly in the department of the Seine Inférieure, and in Orne, Calvados, and Manche.

The furnaces of Nonant (Calvados), founded by the Duchess Elizabeth d'Orléans in the forest of Exmes, made opal glass, crystal, and mirrors of some merit far into the eighteenth century.[1] At this time a struggle was going on between the crystal of England, of Bohemia, and of Normandy "façon de Venise." After 1729, at Saint-Paul-lez-Rouen or Eauplet (Seine Inférieure) the first attempts to imitate English "flint glass" were made by a M. Lefebvre.[2] At Roménil and Val-d'Aulnoy (Seine Inférieure), in the middle of the century, crystal glass of Venice and of Bohemia, and "flint glass" of England were made, both works being under a certain M. Libaude, who in 1772 gained the national prize of 1200 livres for having discovered the "secret" of English crystal.[3]

At Petit-Quévilly (Seine Inférieure) Meyer Oppenheim established, in 1783, a "manufacture royale de cristaux" which was exclusively devoted to English flint glass, and which he had long studied in the glass-houses of Birmingham. The venture did not answer, nor did a second attempt near Rouen in 1784 meet with any success.[4]

[1] Le Vaillant de la Fieffe, *ut sup.*, p. 333.

[2] H. Schuermans, *ut sup.*, Lettre XI., p. 797.

[3] See Appendix, *Original Document*, No. XXXV., for Oppenheim's *specification* for "red transparent glass," and for the "secret" of flint glass.

[4] Much information concerning Oppenheim's proceedings in Normandy has been brought together by M. Le Vaillant de la Fieffe, *Les Verreries de la Normandie*, pp. 300 and 521, drawn from State documents of 1783 and 1784.

OLD ENGLISH GLASSES.

CHAPTER I.

BEADS IN BRITAIN—AGGRY BEADS—"SUN BEADS"—BEADS IN AFRICA—ROMAN BEADS—ANGLO-SAXON BEADS—ROMAN GLASS-MAKING IN BRITAIN.

THE earliest objects in glass, or, speaking more strictly, in vitreous paste,[1] which have been found in Britain are the coloured or "aggry" beads, and there appears to be some reason for believing that a great number of them may have been imported from Phoenicia; but certain types are so widely distributed as to make it difficult, in spite of their distinct characteristics, to decide upon the country of their fabrication. Hence also the dates of beads are rather uncertain, and although some of them have been submitted to the test of chemistry, analysis does not appear at present to have thrown much light upon their age, or to have even warranted the drawing of a distinction, more or less sharp, from their component parts alone, between beads presumably of Phoenician make, those of Roman origin, or of native manufacture in Britain during the Roman occupation and immediately succeeding Roman times, or those of the Anglo-Saxon period. Of special import as regards the more conspicuous of such objects as beads—namely those to which talismanic virtues might have been anciently attached—is the consideration that the approximate date of an interment is not necessarily that of the beads that may be found in it.

With regard to the history of early examples of these glass relics in Britain, it is unfortunate that Strabo, speaking of glass wares, ὑαλᾶ σκευή, should have

[1] See footnote 1, Introductory Notices, p. 5. Dr. Fowler classifies the material of glass as follows:—

First, opaque throughout, both body and ornament; second, translucent or horny, and not yet transparent or crystalline, and the pattern opaque; third, both body and ornament translucent; fourth, both body and pattern transparent.—"Decay of Glass," *Archæologia*, vol. xlvi. p. 83.

expressed himself somewhat ambiguously; it seems reasonable to conclude that he refers to the imports of glass into Britain; the beads would be included among the small-wares alluded to.[1]

The earliest beads were probably self-coloured, or single-tinted, and in vitreous pastes, following the forms of the stone beads, which preceded them.[2] "Sun beads," or those tending usually to the oval form, and cut or shaped so as to exhibit chevrons or rays of colours at each end, were formerly classed as "Druids' beads" or "adders' eggs." They are conspicuous, important, and puzzling antiquities, to which dates have been assigned varying from Phoenician times to the thirteenth century, and even much later. Like other early beads, they are usually of opaque glass, the coloured ornamental parts, by the essential process of manufacture, extending into the substance of the bead, the object being, as it were, built up, with the final coating usually of a rich blue colour, which, it must be confessed, has a very non-Roman appearance. The degree of skill is about the same in each example of the "sun beads," and this might tend to indicate that they all belong to the same period; the manipulation of those of other kinds is almost as varied as the coloured patterns which they exhibit. Many "sun beads" have been found in Britain, and are preserved in museums; it is just possible that some of them are from late Celtic burying-places, but few have any history that might suggest or indicate their origin.[3] As examples of early decorated objects in glass they are important, but they form only one class, and that presumably an early as well as a late one, in a long series of personal ornaments which are, perhaps, more widely distributed throughout the world than any other

[1] In the excavations made in 1893 on the site of the late Celtic pile settlement near Glastonbury, portions both of crucibles and vitreous paste were discovered.

[2] See Introductory Notices, p. 3.

[3] An example is engraved on Pl. V., No. 2, *Inventorium Sepulchrale*. It was found by Faussett at Gilton, Kent, between 1760 and 1763, but whether in a Roman or an Anglo-Saxon interment there is no evidence to show. This example has a dark blue centre or iris, in a light blue star double edged with yellow, the main body of the bead consisting of a radiating red, with an outside of brilliant dark blue. It presents the common polychromatic arrangement of such objects, and is possibly from a Roman grave. It is very improbable that any of them are of Anglo-Saxon origin. They are either older or much later. The appearance of a rod about 9 inches long for making sun beads, preserved in the British Museum, together with a bead of the same pattern, seems to show that the manufacture was at least revived in Venice early in the present century. Notes upon these objects by Mr. Syer Cuming are printed in the *Journal of the British Archaeological Association*, vol. xvii. p. 59. Mr. Cuming somewhat hesitatingly takes them to be of British manufacture. The account of the discovery of the Warrington example, resting as it does upon the shaky evidence of the labourer who found it, is not convincing, and considering the general condition of the objects in question, the author tends to the conclusion that, while some of them may possibly be Roman, the greater number are subsequent to, and perhaps long after Saxon times. Useful information upon sun beads has been brought together by Mr. J. Park Harrison.—*Archaeologia Oxoniensis*, December 1892.

objects of antiquity. The classification and complete illustration of beads is desirable, but it would not be an easy task.[1]

Although colonisation at the Cape has largely destroyed the simplicity of the aborigines, there are still large districts of Africa, in Basutoland, Zululand, Bechuanaland, Matabeleland, and in the regions northward, where beads are still important mediums of exchange. An "aggry" bead is understood in the trade to be that in which the colours go right through; many African tribes will only accept such beads nowadays, but imitations with surface colours are made. Amber beads, roughly shaped, are for the African trade, instead of those rounded and polished for the home market. Certain tribes will not believe them to be genuine unless they are irregularly shaped. Natives of West Africa require the more brilliant beads. The small plain round ones of various colours, such as are used in Europe for fancy work, are also largely exported to South Africa, a ton or two at a time. In Central and Western Africa the natives still continue to drill small pebbles and special ivory-looking sea-shells for their ornaments. Beads are much used for the decoration of mocassins and other personal attributes of North American Indians. In 1621 a subscription was opened in London for funds to erect a glass-house in Virginia to make beads for the aborigines.

Among the beads for Africa are round, square, oblong, and crooked types, and some very beautiful and regular examples. They are also made in amethyst, bloodstone, onyx, carnelian, wood, copper, enamelled and chased, etc., some of the latter being imported from Japan. In coral beads the trade is very large, some of them being worth as much as £5 an ounce, according to the size and colour, and

[1] Excellent work in this direction has been done by the Rev. L. Hassé in a paper on "Egyptian and Irish Beads" (*Journal of the Royal Historical and Archæological Association of Ireland*, vol. viii., 4th series, p. 382, 1889), and by Mr. W. J. Knowles in an article on "Ancient Irish Beads and Amulets," in vol. v., 4th series, p. 532, 1881. The subject has also been touched upon by Mr. R. Day in the same volume, p. 112. Both Mr. Hassé and Mr. Knowles divide beads into classes, and the former writer gives good and suggestive information as to the way in which some of the coloured beads were made, by sprinkling coloured fragments on them, rolling them on a flat surface scattered with assorted grains of glass, which would give blotches passing more or less, according to their size and the force used, into the body of the bead, pressing them in a mould, or by working them upon a grooved or ornamentally incised surface by which many varieties of beads decorated in relief could be obtained. Mr. Hassé considers that the "Egyptian" beads most resembling the Irish "were either such as characterise Roman imperial times, or such as had survived into Roman times." And while "it is probable," as he says, "that all the different classes of Irish beads are more or less represented in English finds," the likelihood is that further investigation would show that, although the presumably late and locally made Irish beads seem to indicate particular methods and appliances, their general history offers no very marked exception to that of beads in other European countries.

An account of bead-making in Venice is given by Mr. Nesbitt (Introduction, *South Kensington Catalogue*, p. ciii.). At the end of the last century between 600 and 1000 men "found occupation at the lamps."

some as low as 1s. a pound. Cowries also are imported from India, and pierced and sold largely as beads in Western Africa.

All the above-mentioned objects are used in Africa for mercantile purposes, principally by Arab and other traders, who receive them on the coast and barter them in the interior for native products, ivory, gold dust, india-rubber, etc. Native chiefs frequently send a man to the coast with three or four samples of particular beads to be transmitted to Europe for the exact reproduction of a quantity. In one case an accident of manufacture having caused a curvature in certain beads, the shape has ever since been insisted upon in ornaments of that quality. Ancient Egyptian or Phoenician beads are still found in use in Africa, and it is one of the curiosities of bead-making, that although modern imitations are very close, the natives can always detect them.[1]

Roman beads of mosaic glass have been found in great numbers in Britain, and with as infinite varieties of patterns as in the glass vessels and other art objects of the same character and in the same material. It would be obviously impossible here to attempt to show in detail a distinction between the presumably Phoenician, the Roman, and the later beads; but it may be taken for granted that in every country to which Tyrian and Sidonian examples made their way, those of Roman source found in the same districts bear the inherited resemblance to them due to a common origin. There should therefore be a difference more marked between Roman and Anglo-Saxon beads than between those of Rome and Phoenicia, and such appears, indeed, to be the fact. But it must always be remembered that the style of each period passed by slow transition into that which succeeded it. No one man of ancient times invented a totally new method of bead-making—he modified and improved; just as, to compare small things with great, no one individual suddenly invented Gothic architecture, or any "period" of it—a word which has proved such a stumbling-block to the modern world; though we may truly say that the earliest pure Gothic building in existence is the choir of

[1] Up to about forty years ago beads of the ordinary self colours were made by small workers in Bethnal Green and Shoreditch. They bought their coloured glass canes from the glass-makers and melted them at a jet, dropping the metal upon a copper wire coated with whitening, the wire being turned during the process, and when cold the beads would slip off. The men were, however, so careless and unpunctual that the trade came to an end. Bead-making at the present day is in continental hands, principally in the district of which Reichenberg, the second manufacturing town in Bohemia, is the centre. The largest export from hence is of glass beads coming chiefly from Gablonz and finding their principal market in Paris. Figured beads come from Venice as of yore. The opening up of Africa is giving an impetus to the trade, and an idea may be formed of its extent by the fact of between sixty and seventy tons of beads having been lately destroyed by fire on the premises of Mr. L. Levin, a bead merchant in Bevis Marks. To the obliging courtesy of this gentleman the author is indebted for much of the above information.

Lincoln,[1] and that the earliest Perpendicular, but impure, is at Gloucester. So there must have been a period when the purest and most beautiful beads were made, but it would be difficult, in a few words, to define its exact limits here. Besides self-coloured examples, Roman beads of blue glass with white decorations are found with Roman interments; green and blue fluted ones with circular or wavy ornamentations in yellow and red perhaps predominate on Roman sites in Britain.

Beads of the Anglo-Saxon period may be mentioned here. They are of as great interest and variety as those of Roman times, but are not of terra-cotta, with vitreous incrustations, as some have maintained, for the two materials could not have been worked together. They are of opaque, vitreous pastes approaching more or less to translucent glass, and often—especially in cases where the colouring is owing to metallic oxides—so disintegrated as to present much the appearance of porcellaneous terra-cotta. Anglo-Saxon beads are decorated with brilliantly-coloured chevrons, circles, spiral threads, wavy ornamentations, striations, vivid dots, etc., and are so far imitations of Roman glass beads; but they are inferior to them both in materials and workmanship. An art which passes through a series of imitations ends at last in gross types in which the original becomes hardly recognisable. And so it was with regard to what may be taken to be the latest phases of Anglo-Saxon beads. The value in the present inquiry of these comparatively rudely-made objects is considerable, inasmuch as they point with much probability to native glass-making in Britain during the times which are now being touched upon, and strengthen the conjecture that such home-made vitreous beads of the

[1] A comparison quite accidental suggests the following note:—The question of the earliest pure Gothic or Early English, as distinguished from the latest phase of Romanesque, has lately had further light thrown upon it by the researches of Canon Church (*Chapters in the Early History of the Church of Wells*). The advanced character and purity of St. Hugh's work at Lincoln, begun 1192, is marked by the round abacus—which had, indeed, been already introduced into the Transition work of William the Englishman at Canterbury between 1179 and 1184—as contrasted with the square or octagonal abaci of Bishop Reginald's building at Wells, 1174-91. Taking all details into consideration, the work at Wells is the earliest Somerset Gothic, with traces only of Romanesque, while that at Lincoln remains the earliest pure Gothic building in the world, the Roman trammels having been finally quite shaken off. The interest of the question consists in the dated illustrations offered of the gradual and certain advance with which the Early English style was unfolded, almost year by year, in places so widely apart as Canterbury, Wells, and Lincoln, up to the perfection which was first attained at Lincoln, where the pure Gothic is not only quite free from French influence, but also greatly in advance of its age, both in France and in England. St. Hugh began his work at the moment of the final change. But it is almost certain that the perfected style would have been first reached at Wells, if the buildings designed by St. Hugh and his architect, Geoffrey of Noyers, had been postponed until after the death of the bishop in 1200. It may be here noted as a further and special point of interest in the present inquiry that, in spite of English architectural advance, we were at the end of the twelfth century fifty years behind France in the art of painted glass.

Anglo-Saxon period, like the vitreous pastes or enamels in the decoration of fibulæ, etc., were nothing less than survivals of the glass manufacture carried on in Britain by the Romans during their military occupation of Albion [1] (Plate 18).

It seems improbable that the legions of Cæsar, when they had well settled in this country, and the civilians who established themselves here under their protection, drew from distant Rome, or even from Gaul—the Keltica of Strabo—the glass vessels, other than those of the choicest kind well known to have been made in Rome itself, which were then indispensable attributes alike of a Roman's existence and of his obsequies. For the fact of a military occupation would not prevent but rather encourage, as things became more reduced to order, the establishment in the conquered country of small glass-houses after the usual ancient manner. These would be at first for working up the *massæ* or lumps of glass spoken of by Pliny, sent from Rome,—or, as is more likely, as regards imports to Britain, from Gaul or Spain,—and later on for the carrying out, principally on the coast for convenience of materials, and by artisans who followed in the wake of the legions, of most of the glass processes known to the Romans. It was one of the natural results of conquest, then as now, that, in modern speech, trade should follow the Eagles, and that, in consequence of the influx of foreign artisans, native workmen should presently become instructed in the new art which the conquerors introduced. With the knowledge that glass-making in small furnaces, as it was then carried on throughout the Roman dominions, was by no means a difficult process, and the principal materials not far to seek in a sea-girt country, it would be much more surprising if it were to be absolutely proved that the Romans did not make glass in Britain than that they did so. As a matter of fact, however, we do not know for certain whether the Romans established glass furnaces here; and, although it is reasonable to presume that they did so, the tangible evidence of it is not very strong.

The late Dr. Guest found in 1848, on the sea-shore between Brighton and Rottingdean, several pieces of coloured glass worn by attrition to the form and appearance of pebbles. On showing them to a lapidary at Brighton, he produced several lumps of coloured glass similarly discovered, from double the size of a man's fist to quite small, in amethyst, amber, emerald green, and deep maroon colours, and portions of which he was in the habit of cutting and polishing as ornamental features in brooches, etc. It was supposed that parts of the cliff, owing to encroachment of the sea, had given way, and carried down in their fall the remains of a Romano-British glass manufactory, the pieces cast upon the shore

[1] See Wright, *The Celt, the Roman, and the Saxon*, 1st edit., p. 226.

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being portions of lumps of glass—the *massae* of Pliny's description—which were either imported into Britain to be worked up, or made on the spot from local constituents to be transmitted to inland cities. It is to be noticed that the Brighton lumps of glass were all coloured ready for use, and not, as Pliny appears to imply in speaking of the glass *massae*, plain, to be tinted subsequently by the glass-workers. As far as the author is aware no similar evidence pointing directly to local Roman glass-houses has been found in Britain. Mr. Thomas Wright was of opinion that the fragments found upon the Brighton shore were "no doubt parts of the lumps (*massae*) of the material which were sent away hence to the glass-workers in the great towns through the island. Pliny seems to intimate that the mass of glass thus sent out was colourless, and that it was coloured by the glass-workers, but it seems here to have been made in coloured masses to be still more ready for use." Thus, from the discoveries on the Brighton coast, Mr. Wright establishes in Britain not only glass-making according to the Roman practice, and during Roman times, but he takes the question a stage further by also showing from them that lumps of a more carefully made metal, namely coloured, were made on the coast near Brighton and sent away for working up to inland cities in Britain. Some antiquaries may think that this is building too much upon slight foundations.[1]

Mr. Roach Smith, speaking of the collection of Roman glass at Boulogne, also quotes Pliny, who, after describing the process of glass-making as practised

[1] The Brighton evidence is unfortunately inconclusive, because there is no certain proof that the lumps of glass in question were Roman at all. It is this absence of certain proof that has caused the hesitation and caution of many antiquaries of authority in pronouncing one way or another upon the question. It must be remembered with regard to it that the Romans established in Britain iron, copper, tin, and lead smelting works, and exported the proceeds; that they also established pottery kilns, fulling and dyeing works, and other industries, and that there is no reason why glass-making should not have been also carried on here, as in Gaul, though perhaps to a smaller extent, and possibly in the south of Britain and near the coast only. We must await the issue of further research.

Allied to the question of glass in vessel form is window glass, which, in Roman times, was made by simply pouring the molten metal upon a slab of marble or stone, the result being panes smooth and glistening on one side, and rough on the other, and consequently translucent and not transparent. Fragments of such glass have been not uncommonly found in England on sites of Roman villas. In 1855 the Society of Antiquaries of Newcastle-on-Tyne caused excavations to be carried out at Bremenium, or High Rochester, on the Watling Street in Northumberland to the north of the Roman Wall. In Dr. Bruce's Report the following occurs:—"Under the head of glass may be reckoned some fragments of vessels formed of a very fine material and 'cut'; some window glass, and some fragments of bottles of the ordinary green shade. There are besides some scoriae of glass; but whether they have resulted from the manufacture of the article, or have been produced by the burning of houses in which glass vessels were, it is difficult to determine."—See *Archaeologia Aeliana*, II. S., vol. i. Thus the inquirer is baffled at every step in this direction.

A large pane of glass and many portions were found, December 1894, at the Roman villa at Darenth, Kent, during the course of the exploration conducted by Mr. G. Payne.

in Italy, adds that the manufacture had extended in his time to Spain and Gaul—"Jam vero per Gallias Hispaniasque simili modo arena temperantur."[1] Mr. Roach Smith says that it may reasonably be considered that the Boulogne glass vessels were fabricated in Gaul; "and also, that from Gaul were imported into Britain the glass vessels which are so frequently found among the ruins of its ancient towns, and on the sites of burial-places, in quantities, and under circumstances sufficient to prove that their use was not confined to the high and wealthy."[2] This was his opinion before the time of the discoveries at Brighton by the illustrious scholar the Master of Caius; but, writing many years later, Mr. Roach Smith describes four remarkable glass unguentaria fitting together at their ends in pairs, from a Roman leaden coffin found at York. These vessels, he says, "are an additional evidence of the skill of the Romans in the working of glass, and it may be in the town of Eburacum itself."[3]

The question standing as it does at the present day, it appears that while there is no kind of reason why the Romans should not have made glass in Britain, as they made it in Gaul, there is at present no absolutely certain evidence of the manufacture, such as inquirers might have been justified in expecting to find. It is, it is true, but a mere detail of general history which, not having been honoured by the notice of Tacitus, or of Marcellinus, has yet to be retrieved from the buried life, or from the graves of the past.

[1] *Nat. Hist.*, lib. xxxvi. c. 26, § 66. [2] *Collectanea Antiqua*, vol. i. p. 2, 1848.
[3] *Ibid.*, vol. vii. p. 177, 1880.

CHAPTER II.

ANGLO-SAXON GLASSES—MANUFACTURE—DECLINE—REVIVAL IN THE NORTH—ARTIFICERS FROM GAUL—A GLASS-MAKER FROM MAYENCE—GLASS-MAKING IN KENT AND SUSSEX—CLASSIFICATION, PROVENANCE, AND CHARACTERISTICS OF ANGLO-SAXON GLASSES.

That the glass drinking-cups found in England which we are accustomed to associate with Anglo-Saxon times are, like those of the Merovingian period, based upon late Roman models, there seems no reason to doubt. But while the evidence in favour of the direct transmission of the art of glass-making from Roman to Merovingian days may be inferred to a certain extent on the Continent from examples apparently consecutive in date—though rude and imperfect manufacture makes it difficult to accurately classify them—which have been found throughout a wide area, such suggestion of continuity does not seem to be exhibited by the glass cups which our own land has surrendered to excavators. It will be convenient presently to divide these into four classes.

It is true that Post-Roman glass vessels have been found here in greater number and variety than on the Continent, thus favouring the supposition that such glasses were home-made, and possibly causing a superficial inquirer to tend to the thought that some of the glasses of precisely the same character found on the Continent may have also been made in England and exported. It is unfortunate that the tangible evidence of Anglo-Saxon glass furnaces here is entirely absent. Yet, if the probabilities are strong that there were glass furnaces in Britain in Roman times, they should be far stronger as regards the same industry during the later period. *Per contra*, while there are some seeming indications of glass furnaces in Britain during the Roman occupation, we have absolutely no such testimony as regards the practice of the manufacture during Anglo-Saxon times.[1]

This condition of the case introduces the historical question whether, shortly

[1] See Introductory Notices, p. 24.

after the departure of the Romans—and supposing that they made glass here as they did in Gaul and elsewhere—there was not a gradual decline of such surviving manufacture until the middle of the sixth century, when the country had at last become somewhat settled under Saxon and Engle rule. We know that such a falling-off in the art of glass-making took place in the regions of the Western Empire; like causes would have produced like results; and such an industry, small though it may have been, and by no means unfamiliar to the invaders, could not have been easily carried on during the confusion, violence, and bloodshed of the period during which Britain became England, 450-560, and the Britons were dispossessed. In the period of settlement which followed, a revival in the glass-makers' art may well have taken place here, during which some of the cups in Class No. 2 which have been revealed to us may have been made. But although such revival would at first have been hampered by the internecine strife which soon began between the Saxon and the Engle, we must gather, on the one hand from the testimony of the graves, that glass-making was carried on from this time in the south of England; and on the other, from documentary evidence, that the art had certainly died out in the North soon after the middle of the seventh century.

Now, as to its re-establishment and re-use in the north of England. We find evidence of this in the statement of Bede concerning the foundation by Benedict Biscop of his church and monastery at Wearmouth in 675:—

> When the work was drawing to completion, he sent messengers to Gaul to fetch makers of glass, more properly artificers, who were at this time unknown in Britain, that they might glaze the windows of his church, with the cloisters and refectory. This was done and they came, and they not only finished the work required, but also taught the English people their handicraft, which was well adapted for enclosing the lanterns of the churches and for the vessels required for various uses.[1]

The inhabitants of Northumbria must have been well accustomed to seeing remains of the dull Roman translucent glass in the villas and military stations along the line of Hadrian's Wall.

The question here arises whether glass windows were not first used by Wilfrid at York. He was enthroned in 669, when he began the repairs of his cathedral; he found it in a great state of dirt and neglect, the windows empty, and birds flying in and out; deposed in 678, he was restored in 686. It is improbable

[1] "Proximante autem ad perfectum opere, misit legatorios Galliam, qui vitri factores, artifices videlicet Brittaniis catenus incognitos, ad cancellandas Ecclesiae porticuumque et coenaculorum ejus fenestras, adducerent. Factumque est, et venerunt; nec solum opus postulatum compleverunt, sed et Anglorum ex eo gentem hujusmodi artificium nosse et discere fecerunt: artificium nimirum vel lampadis Ecclesiae claustris vel vasorum multifariis usibus non ignobiliter aptum."—Baeda, *Historia Ecclesiastica*, cura Jo. Smith, edit. 1722, p. 275.

that he inserted the glass—through which, nevertheless, as Eddius says, the light shone within,[1] therefore cylinder-made and not cast glass—after 678, and possible that it was blown by the men his friend Benedict Biscop brought over from Gaul. At the same period there was, according to Bede, another Wilfrid at Worcester, who held the see for thirty years, until his death in 744, and who also substituted glass for the wooden shutters in his cathedral, or for the wicker-work lattices then in use. The new material excited great astonishment there, and supernatural agency was suspected when the moon and stars were seen through a substance which excluded the weather.[2] It was therefore its transparency, rather than the glass itself, which caused amazement at Worcester, and to a greater extent than at York about fifty years before. Thus the making of glass adapted for windows, "and for the vessels required for various uses," established by Benedict Biscop in the North, appears to have at once flourished, but not for long, because in or about the year 758 Cuthbert, Abbot of Jarrow, and a disciple of Bede, wrote as follows to Lullus, Bishop of Mayence :—

> If there be any man in your diocese who can make vessels of glass well, pray send him to me; or if by chance he is beyond your bounds, in the power of some other person outside your diocese, I beg your fraternity that you will persuade him to come to us, for we are ignorant and helpless in that art; and if it should happen that any one of the glass-makers through your diligence is permitted, D.V., to come to us, I will, while my life lasts, entertain him with benign kindness.[3]

Window-glass making, as it was then practised, whether cast or blown, was no doubt easier than the fabrication of vessels, but Bede tells us that glass was "well adapted" for both purposes at Wearmouth in 675, showing that the art was carried on there in both kinds, and that the foreigners taught the English their handicraft. A curious point is that men should have been brought from Gaul to teach mainly Saxons and Engles, whose immediate ancestors must have been familiar with the glass vessels from the Rhine-land. Eighty years later the art of glass-making in vessel form is shown by Cuthbert to have been completely lost, at least in the North, and a teacher is desired—not again from France, whence it might be supposed both the makers and the glasses themselves could still

[1] ". . . per fenestras introitum avium et imbrium vitro prohibuit, per quod tamen intro lumen radiebat."—*Vita S. Wilfridi. Rerum Anglicarum Scriptores Veteres*, vol. ii. p. 59, § xvi., T. Gale, 1691.

[2] J. Clepham, "The Manufacture of Glass in England; Rise of the Art on the Tyne," *Archæologia Æliana*, New Series, vol. viii. p. 108, 1880.

[3] "Si aliquis homo in tua sit parochia qui vitrea vasa bene possit facere . . . mihi mittere digneris, aut si fortasse ultra fines est in potestate cujusdam alterius sine tua parochia, rogo ut Fraternitas tua illi suadeat ut ad nos usque perveniat, quia ejusdem artis ignoti et inopes sumus, et si hoc fortasse contingit ut aliquis de vitri factoribus cum tua diligentia, Deo volente, ad nos usque venire permittatur, cum benigna mansuetudine vita comite illum suscipio."—Ep. Bonifacii, ed. Giles, Ep. cxiv.

have been easily obtained, or possibly even from Kent, but from the distant diocese of Mayence, in a country long renowned for glass-making, and from which region in all probability the glasses in Class No. 1 had been drawn during the sixth century.

At Jarrow, then, only a few miles from Wearmouth, steps were taken in 758 for a fresh revival of one branch of the art in question, which had so soon and so strangely perished, with what success, or if with any, we know not. The elucidation of the subject is beset with difficulties; a great number of minute historical and archaeological points have to be weighed and considered in dealing with glasses of the Anglo-Saxon period, the matter would require a volume to itself, and there is always the danger, in a limited notice, of being unconsciously tempted or led to extract more from isolated records than they properly give. In any case the information contained in the documents concerning glass-making in Northumbria in the seventh and eighth centuries is not necessarily also applicable to a presumed practice of the same mystery in Kent or Sussex, of which operation it is conceivable that the northern prelates know as little in the seventh and eighth centuries as we do at the present day.[1]

It is improbable, if Cuthbert's revival was carried out, that it was considerable or of long duration. The sword of the invading marauders fell first and most heavily in the countries drained by the Tyne, the Tees, and the Humber, and the wretched condition to which the country generally was reduced from the third quarter of the eighth century by the Danish invasions must have almost eclipsed the art. This again makes it improbable that glass-working was carried on, save to a somewhat limited extent, in England, perhaps only in Kent and Sussex, during the following hundred years, or until the time of Alfred (871-901), when the Danes were finally overcome and the country brought into a comparatively high state of civilisation.

Glass-making may then have revived, but, with regard to this point, we have a passage in a MS. of Anglo-Saxon Dialogues of about the middle of the tenth century, by Archbishop Alfric, in which a speaker, in the character of a merchant, states that he imports glass to England, together with costly gems, gold, silver, ivory, and other commodities of less value.[2] The glass would hardly have been

[1] See Introductory Notices, p. 87. "The glass vessels from the Saxon graves in Kent are of a great variety of form, and of very marked character."—*Collectanea Antiqua*, vol. ii. p. 162.

[2] Cotton MS., Tib., A. III.—"I say that I am useful to the King, and to the ealdermen, and to the rich, and to all people. I ascend my ship with my merchandize, and sail over the sealike places, and sell my things, and buy dear things which are not produced in this land, and I bring them to you here with great danger over the sea; and sometimes I suffer shipwreck, with the loss of all my things,

spoken of in this connection if fashioned as cast slabs for windows, nor, perhaps, if in the form of vitrified beads, and may therefore be referred to the Anglo-Saxon drinking-vessels of the later kind discovered in England, and of which counterparts have been found on the Continent. These are the small glass cups with constricted bodies, plain, stringed, or fluted (Fig. 123), found, for example, in a grave of the ninth century at Oberflacht, in Swabia,[1] in Normandy, in Cambridgeshire, and in Kent—about thirty of them, apparently a trader's consignment[2]—and the bowls.

FIG. 123. (One third.)

If any of the glasses of the Anglo-Saxon period found in England are earlier than the sixth century, which is unlikely, their certain identification would be very difficult. They have, moreover, all been usually assigned, upon apparently sufficient general historical, and archaeological evidence, to times not previous to the sixth century, but in and subsequent to it. Those of cognate character from the Continent have been similarly ascribed to the Merovingian and Carlovingian periods:—

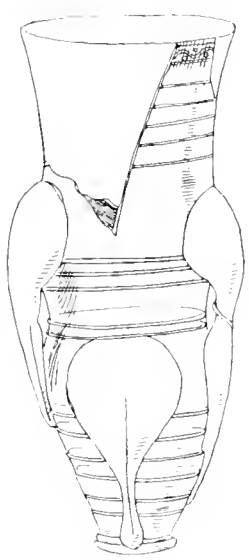


FIG. 124. (One third.)

The entire series of such glass vessels found in England may be roughly divided into four classes.

1. The stringed and lobed vases (Fig. 124).

2. The tall or short, conical or trumpet-shaped cups, ribbed, fluted, waved, or stringed, one variety representing, perhaps, the twisted ale-cups of Beowulf, and all deriving from observation or recollection of Roman tumblers, such as may be seen in their earlier forms in the Museo Nazionale at Naples, obtained from Pompeii; the usual funnel-shaped

scarcely escaping myself." He is then asked, "What do you bring to us?" to which he answers, "Skins, silks, costly gems, and gold; various garments, perfumes, wine, and oil, ivory, and orichalcus (copper); brass and tin, silver, glass, and such like."

The merchant's words are: "Ic secge þæt behefe ic com ge cinge and coldormannum and weligum and callum follce ic astige min scyp mid hlæstum minum and rowe ofer sælice dælas and cype mine þinge and biege þincg dyrwyrðe þa on þisum lande ne beoþ acennede and ic hit to-gelæde eow hider mid micclan plihte ofer sæ and hwylon forlidenesse ic þolie mid lyre ealra þinga minra uneaþe cwic ætberstende"—"hwylce þinc gelædst þu us"—"pællas and sidan deorwyrþe gymmas and gold selcuþe reaf and wyrtgemange win and ele ylpesban and mæstinge ær and tin swefel and glæs and þylces fela."—*Library of National Antiquities*, vol. i., Vocabularies, edited by T. Wright; *Colloquy of Archbishop Alfric*, p. 8 (privately printed, 1857).

[1] *Archaeologia*, vol. xxxvi. p. 129, "The Graves of the Alemanni at Oberflacht in Suabia," by W. M. Wylie, Pl. XIV., Fig. 1.

[2] Akerman, *Remains of Pagan Saxondom*, Pl. XXXIII., Fig. 1. One of about thirty others found at Wodensborough,—a suggestive name,—Kent, at the end of the last century; this was apparently a consignment from the Rhine-land. These cups were wickedly used at harvest-homes, and were finally all broken.

glasses, and the very rare examples like seventeenth-century hunting-horns[1] (Figs. 125-128).

3. The small vessels with more or less globular bodies for holding in the

FIG. 125. (One third.)

FIG. 126. (One third.)

FIG. 127. (One third.)

FIG. 128. (One third.)

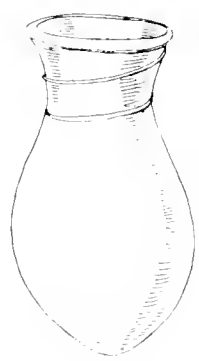


FIG. 129. (One third.)

palm of the hand, narrowing, sometimes quite suddenly, to a short neck, and with rounded, pointed, or slightly flattened bases. The bodies of these globular glasses

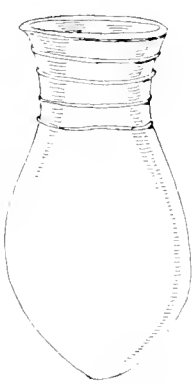


FIG. 130. (One third.)

FIG. 131. (One third.)

FIG. 132. (One third.)

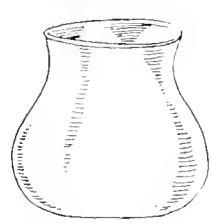


FIG. 133. (One third.)

are plain, stringed in spirals, in waves, in flutes, or in sketchy zigzag lines, recalling Roman examples in blue and yellow, and some of the scribbled beads (Figs. 129-144).

[1] See Introductory Notices, pp. 22, 87. One of the pure funnel form, stringed and fluted, was found at Osingel, Kent, engraved *Collectanea Antiqua*, vol. iii., Pl. III., No. 8; and a plain one of a different form at Gilton in the same county, engraved *Inventorium Sepulchrale*, Pl. XVIII., No. 5.

A beautiful example of a stringed beaker is shown on p. 24, Fig. 31, *sup.* It is not quite accurate to say that "no glass vessels have been found in interments in the Scandinavian peninsula" (p. 19, *sup.*) Fragments of a lobed glass were discovered in a ship-grave at Borre, Norway, 1857; and the remains of two others, in pale blue glass, at Vendel, in Uppland, Sweden, in 1881.

4. The bowls, plain, ribbed, or banded, and sometimes with a folded edge (Figs. 145, 146); and the latest examples of the palm cups of Teutonic origin,

FIG. 134. (One third.)

FIG. 135. (One third.)

FIG. 136. (One third.)

FIG. 137. (One third.)

with constricted bodies and often with a button at the bottom outside (see Fig. 123). The use of the palm cups and bowls is exactly shown in the Illuminated Manuscripts.

All the glasses which have been enumerated have been recovered from the graves of their ancient possessors; there is no question whatever as to their authenticity; they all seem to have been based more or less upon reminiscences of late Roman glass cups and vessels of the fourth century, and form without doubt the

FIG. 138 (One third.)

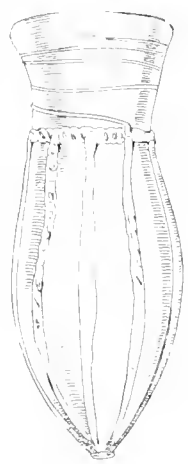


FIG. 139. (One third.)

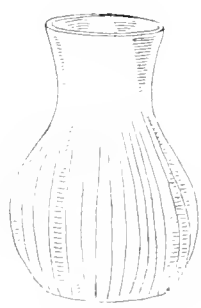


FIG. 140. (One third.)

FIG. 141. (One third.)

most interesting series, as they are the most fragile of all the ancient vessels for domestic use which English earth has disclosed to the explorer.[1]

The stringed and lobed vases, with bases just large enough to support them in an upright position, are perhaps the most rare and remarkable of all the glasses of early Post-Roman times. They are, indeed, rather vases than glasses, but some of them are allied in form to the trumpet-shaped cups or elongated tumblers, which must approach them very nearly in date. The vases discovered in England are of a character so precisely similar to the delicate and very precious examples of the

[1] It is significant that the greatest variety of forms have come from graves in Kent.

same period which have been found in Frankish or Merovingian graves, as well as in Sweden, and even so far off as at Narona in Dalmatia, as to suggest the manufacture of these particular vessels in a district almost continuously familiar for ages with the higher characteristics of glass-making. It is possible, therefore, that all the fragile and carefully-fashioned cups of Class 1 were made in the Rhine district between Coblence and Cologne, or in the neighbourhood of Mayence, or in Trèves itself, and imported from thence into the different countries in which they have

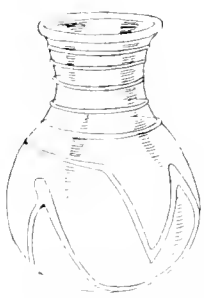


FIG. 142. (One third.)

FIG. 143. (One third.

FIG. 144. (One third.)

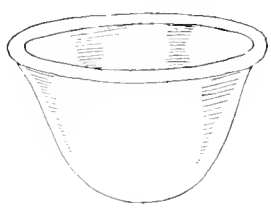


FIG. 145. (One third.)

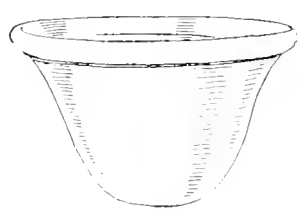


FIG. 146. (One third.)

been found; although against this conjecture is the fact that some of the stringed and trumpet-shaped glasses—though somewhat less difficult of execution, are quite as frail and delicate in make as the lobed cups, and appear to have rather an English than a continental origin. It is to be noted, with regard to these lobed vessels, that the supposed date of the grave in which they are found is not necessarily that of the glass itself, though the difference between them cannot be great.[1]

[1] In England they have been found at Castle Eden, Durham, engraved *Archaeologia*, vol. xv., Pl. XXXVI., p. 402; Fairford, Gloucestershire, engraved Wylie, *Fairford Graves*, Pl. I., p. 17; Reculver, Kent, engraved Akerman, *Pagan Saxondom*, Pl. II., p. 3; Gilton, Kent, engraved *Inventorium Sepulchrale*, Pl. XVIII.—this example has a wavy line interspaced with dots round the lip; Sarre, Kent, two examples: in one the lobes are vertically separated by long trails; both are engraved *Archaeologia Cantiana*, vol. vi., Pl. V. Figs. 1 and 3; Wickhambreux, Kent, of the rare blue colour, engraved *ibid.*, vol. xvii., Pl. III. Fig. 5; Ashford, Kent, tall, conical or trumpet-shaped, engraved Baron J. de Baye, *Anglo-Saxon Antiquities;* Coombe, Kent—this example fell into the hands of an old lady, and was long used as a sugar-basin, *Collectanea Antiqua*, vol. ii. p. 221; Weston, Hampshire, *ibid.*, p. 222; Chatteris, Cambridgeshire, engraved *Gentleman's Magazine*, March 1766, and described by Stukeley.

Among examples on the Continent is one from the Selsen cemetery, near Nierstein, now in the Museum at Mayence, discovered by Messrs. Lindenschmidt, engraved, "Das Germanische Todtenlager bei Selzen in der Provinz Rheinhessen," and in *Collectanea Antiqua*, vol. ii., Pl. LI., p. 218; one from a grave at Nordendorf, now in the Museum

19.—MEROVINGIAN GLASS.

20.—MEROVINGIAN GLASS.

The method of the manufacture of the lobed glasses was so curious, and implies the continuance of such advanced technical skill in the latter half of the sixth century, that a description may be attempted here.

A "gathering" of glass being first blown into bulb shape, and fashioned, a foot was formed, the body was stringed, and the whole allowed to cool; lumps or "prunts" of molten glass were then attached one by one to the sides of the cup, and irrespective of the lines of the stringings. The hot liquid metal acting upon the thin cooled sides of the object caused it to give way successively at the points of attachment under renewed pressure of blowing. The concavities thus formed extended into the bodies of the prunts, the projecting outer points of which, being seized by the *pucellas*, were rapidly drawn forward to a tail, and attached to the outside of the glass lower down. The invariable downward position of the free pendant hollow lobes made in this way was brought about by the natural action of the operator, who handled the material he was attaching in the direction away from his body, and, necessarily for this particular manipulation, working with the foot of the vessel farthest away from him.[1] The whole of the pendant lobes having been thus put on, and quilled or ornamented, as some of the examples show, the *pontil* was attached to the base, the blowing-iron whetted off the other end, and the closed bulb being softened at the mouth of the pot, presently became an open cup; the mouth of the glass was now sheared, widened, and finished, the stringing of the upper end of the vase usually forming part of this final operation (Plate 19—Wickhambreaux, Kent; Plate 20—Ashford, Kent; Plate 21—Sarre, Kent).

The tall or short conical or trumpet-shaped cups of Class 2, ribbed, fluted, waved, or stringed, are almost as interesting in their shapes, and fragile in their character, as the lobed vases. The globular palm cups of Class 3 have less variety of form, but are distinguished by the careful accuracy of their stringings and sketchings. Some of the examples are of heavy make. Circumstances of provenance and indirect historical evidence seem to point to glass-houses in the weald of Kent and Sussex as the source of some of the Anglo-Saxon glasses in Class 2 and Class 3.

at Munich; one in the Wallraf-Richartz Museum at Cologne, with the lobes quilled like the Fairford example; and one in the Museum at Nuremberg, with a single row of lobes, in this respect like the Sarre example, but with no "prunts" above them. The whole of these vessels, with the exception of that from Ashford, Kent, are of the vase form. Further examples are preserved in the Museums at Wiesbaden, Mayence, Brussels, and Berlin.

[1] The points of the "prunts" (*blobs*, *stachelnuppen*, or *doornstokje*) of the sixteenth and seventeenth century Igel, Krautstrunk, Roemer, and Berkemeyer are invariably set upwards, indicating their application as the last operation of the maker and after the attachment of the pontil to the base.

The full-mouthed and almost semi-spherical bowls in Class 4 apparently first came into use with the globular palm cups of Class 3, which they long survived. Like them and all the others, they varied in colour from amber and different shades of green, and sometimes of blue, to horny white. They have also been found in France and Germany. An unusually large and heavily made example in amber-tinted glass, from a grave at Desborough in Northamptonshire, measures $7\frac{1}{2}$ inches in diameter and $4\frac{3}{4}$ inches in height.[1]

The absence in the greater number of the varieties of Anglo-Saxon glasses of any base upon which they could stand, has been considered as indicative of the desire of their ancient users not to attempt to set them down unemptied, or to linger in applying them to the proper purpose. Pressure in this direction was, doubtless, not much needed, for it may be remembered that excessive drinking in England was at that period a fashionable vice in all ranks of society. And it is an interesting item of the higher social life of those days that in the employment of glass cups and bowls, of which the use could not at any time during the Anglo-Saxon period have been other than restricted, their limited capacity—a necessity probably of their manufacture—would imply prolonged carouses, with dangerous tippling out of small "tumblers," as contradistinguished from copious and potent draughts from horns and portly metal or wooden goblets of ordinary use. We know exactly from Illuminated Anglo-Saxon MSS., which bring us *tant soit peu* into the light of day, in what manner the feasters and revellers sat at table or on the "mede settle,"[2] handled their drinking-vessels—a not unimportant detail—and pledged one another with their small conical vessels, their round-bottomed cups, and their little bowls—the two latter kinds being always held in the palm of the hand—or drank deep draughts from great horns.[3] Whether the cups and the bowls in the illuminations are always intended for glass it is difficult to say, but their forms are undoubtedly versions of those of the later glass vessels recovered from the graves. A few of the cherished glasses may have lingered in use in England in high places, or in quiet Benedictine monasteries where the illuminations were made, after their fabrication had been abandoned here, but the probability seems to be that many small cups and bowls were imported from the Continent, most likely from Germany, during the ninth century, by traders like the merchant of the *Dialogues;* it would be reasonable to believe that many

[1] Now in the British Museum, engraved *Archaeologia*, vol. xlv. p. 469.

[2] Cotton MS., Tiberius, B. 5.

[3] *Ibid.*, Julius, A. 6; Cleopatra, C. 8.

also came then from France. The drinking habits of the people are not likely to have improved after the irruptions of the boisterous and intemperate Danes; and while the destruction of glass vessels must have been rapid, the demand for them would also have been such as a limited and dislocated industry could not have alone supplied.

To arrange the whole series of glass cups of the Anglo-Saxon period in rigid order of date is as desirable as with the beads, but with our present knowledge this is, perhaps, not possible. Any suggestion upon this point must consequently be now put forward with great diffidence, and because the origin and comparative date of these glass vessels is, as has been intimated, a matter of considerable complication. Moreover, the question becomes the more difficult of accurate solution on account of the finding of glasses of precisely the same make and shape in countries so widely distant from each other. Their story is, in short, as obscure as the details of much of the history of the so-called dark period—that is, of the period dark to us—to which they belong.

With regard, therefore, to the chronological classification and the provenance of the glasses of the Anglo-Saxon period that have been found in England, the author desires to do no more at the present time than to suggest—*sous toutes réserves*—as follows:—

1. That the stringed and lobed glass vessels of vase form, and those of trumpet or tall conical shape, similarly ornamented, come from the district of Cologne, Coblence, or Trèves, and are the earliest in point of date, and derive accordingly from late Roman models more immediately than any others. Their presence in widely separated parts of the Continent, as well as in England, would thus be accounted for. They do not appear in Illuminated MSS., and may have been imported to England during the latter half of the sixth century.

2. That those stringed spirally or otherwise, conical, trumpet, or funnel shaped, waved, ribbed, or fluted, thick or thin, the spirally stringed being perhaps the earlier, may, with almost equal probability, have been produced in England or in France; but with a leaning towards the view of the greater variety having been made in England in the latter part of the sixth, and during the seventh century. We have seen that the glass-makers' art had died out in the North before 675; it may well have continued in the forests of Kent and Sussex without the cognisance of Bede. But while many of these are vessels such as any glass-maker of moderate capacity could produce, if we

may claim special English peculiarities in any of the shapes, the chemists may perhaps discover in them distinctive qualities of metal also.

3. That the above remarks as to provenance and make apply also to the globular ornamented and plain palm cups of slightly varying forms, which apparently come next in date, and carry us on to nearly the end of the eighth century, when the coming of the Danes must have deeply affected their manufacture here.

4. That the semi-spherical bowls, also for use in the palm of the hand, were made contemporaneously in England, France, in the Rhine district, and possibly beyond it. That the period of the English bowls is, generally speaking, the latter part of the eighth, the ninth, and perhaps some way into the tenth century, and coincides with that of the German cups with rounded bases and waisted or constricted bodies, of a special and late Teutonic type, rarely found here, and probably never made in England, but imported;[1] and that the bowls found in England were concurrent with the later palm cups, but outlasted them, and are consequently the latest of Anglo-Saxon glass vessels. This is also a fact which seems to be well authenticated by the Illuminated MSS.

It will be at once understood that the four classes of glass drinking-vessels of the Anglo-Saxon period present no exception to the usual rule in the allocation of a series of archaeological objects; the classes overlap one another in both directions, and are merely arbitrary divisions, more or less, for the purpose of endeavouring to obtain and show some order. The difficulties as to origin or provenance are, of course, more emphatic than those of date.

The fifty-third illustration of the Bayeux tapestry—ET · HIC · EPISCOPVS: CIBV̄: ET: POTV̄: BENEDICIT—represents a feast at a horse-shoe table, at which Odo, standing by the side of the Conqueror, blesses the viands, the scene taking place after the arrival of the army at Hastings. Small semi-spherical bowls are depicted for drinking purposes, showing, with the perfect accuracy of the Record, as far as the range of its materials would allow, that vessels of this not very convenient form were still in use in the middle of the eleventh century, and were held in the palm of the hand and steadied and supported for service by the tips of the fingers and thumb.[2] The capricious and limited polychromy of the Stitchwork makes it difficult to say for certain

[1] They are said to be of inferior glass to that of the generality of vessels found in England.

[2] In the Nineveh sculptures the kings are often represented holding shallow bowls in exactly the same manner.

whether these Norman representatives of the last survivals of the ancient Anglo-Saxon, Merovingian, and Carlovingian drinking-vessels were made of glass, metal, or wood. But their colours—green, blue, red, and yellow—are all applicable to glass. That the shape of much earlier times, whatever the material composing it, was retained up to so late a date is, however, a point of interest, and this is, *pro tanto*, a step towards the correct classification of Anglo-Saxon glasses.

CHAPTER III.

ORIGIN OF PAINTED GLASS IN FRANCE—ORIENTAL DRINKING-CUPS—PAINTED GLASS IN ENGLAND—EARLY ENGLISH, DECORATED, AND PERPENDICULAR GLASS—GLASS IN THE BEAUCHAMP CHAPEL.

Benedict Biscop's glass for the windows of Wearmouth in the last quarter of the seventh century is an isolated and curious record, and the fact of the makers having been obtained from France is suggestive, because we know from the *Treatise of Theophilus*, written apparently in the twelfth century, and probably in Germany, that France was the cradle of the art of painted glass for windows at least as early as at that time. Some, indeed, consider the *Treatise* as a record of the tenth century. The probability is that Biscop's glass was plain white, and perhaps also coloured in the mass, and in small pieces for insertion in the apertures of stone or marble, or perhaps in metal frameworks for window openings, like those in the church of St. Sophia at Constantinople of the early part of the sixth century, and that Limoges in the Limousin, or its neighbourhood, was the spot where the art of painted glass was first practised.

It is almost essential to the consideration of the subject in hand that something should be said about window-glass in England in mediaeval times, and it will not be irrelevant in the first place to recall to mind that at Limoges, so famous in the Middle Ages for its enamelling, a Venetian colony was settled as early as 979 for general purposes of inland trade, and for which its position was very favourable. Thus some of the commerce and of the arts of the East, including those of Byzantium, found their way into the West by way of Alexandria, Marseilles, and Limoges; and as there was an amber trade route from Denmark and the Scandinavian peninsula, and along the shores of the Baltic, to the East through Bohemia and Hungary, from the end of the first quarter of the fifth century—as is attested, among other

evidence, by the dates of Byzantine coins found in those regions—so there was another commercial line, originating in the early tin trade with Britain, of which Limoges was at once a distributing point and an art centre. Greek artists, indeed, as the Abbé Texier has shown, were settled at Limoges later on, and without assuming that the Byzantine enamellers were the inventors of glass-painting, there can be no doubt that it is to the Byzantine influence, which came westward in this way, that must be attributed a great part of the impulse then given both to enamelling and glass-painting in western Europe. We have seen that the art of enamel painting on drinking-vessels was practised by the Romans, at least as early as the fourth century. The ascertained resemblance between the texture of the twelfth-century glass and that of the antique is too close to have been accidental, and the alien character of the former is supported by the Byzantine style of the earlier mediaeval glass-painting in windows, both in their design and drawing.[1]

The earliest well-authenticated existing example of painted glass for windows is at Saint-Denis, of the middle of the twelfth century, and then presented by Suger to his church. It is executed according to the method described by Theophilus, the colouring being effected by pieces of white and tinted glass, and the drawing and pencilling of the design done with enamel brown. This type of painted glass continued until about 1250, as the examples at Angers, Sens, Chartres, Bourges, Canterbury, Lincoln, Salisbury, and other places attest.[2]

But while the window-glass was being treated during so long a period in this manner, it is remarkable that there does not appear to have been corresponding artistic activity in the direction of the decoration of glass drinking-vessels in England, or perhaps up to the end of the twelfth century in France. In both countries the choicest glass drinking-cups that have been recorded in inventories, or that have been preserved, are not Byzantine but Oriental—Saracenic, "à la façon de Damas," and "à la Morisque," as spoken of, for instance, in French royal inventories of the last quarter of the fourteenth century.[3] Both in England and France such vessels were mounted in silver, gilt, and enamelled, and were evidently much esteemed, so that it becomes the more difficult to understand why French and English window-glass makers and painters did not bend themselves to the easier process of making

[1] See Winston, *Memoirs Illustrative of the Art of Glass Painting*, p. 237; and Introductory Notices, p. 88.

[2] *Ibid.* p. 238.

[3] See Introductory Notices, p. 90.

and painting, and, after about 1310, yellow-staining their own "coupes de voirre" —a mode of decoration so successfully practised in Germany on drinking-vessels in the latter part of the sixteenth and the early part of the seventeenth centuries—instead of continuing to accept them ready-made from the Orient, with their imperfections of manufacture and beauty of enamelled decorations, at the hands of the traders of Limoges, and of pilgrims from the East. That the English and French glass-makers did not so exercise their undoubted great talents in this direction we might gather from the fact that, when they should have been doing so, the glass artists of the Orient were sending westward their much-prized glass cups, and that no similarly valued drinking-vessels of the period under consideration have come down to us, or been noticed in inventories, as specially of French or of English make.

Yet the absence at the present day of the glasses themselves, or even of fragments of them, is, as we shall duly see, no valid proof that none were produced; examples of the glasses of a period centuries nearer our own time are similarly wanting. It must be remembered, in this regard, that Roman and Anglo-Saxon glass vessels have only been preserved because pagan custom decreed that they should be carefully buried in the earth with the ashes or bodies of their ancient owners. With the introduction of Christianity such preservation naturally ceased, save under special circumstances. And if it is a matter for wonder that no English mediaeval glass vessels have escaped destruction, and simply a few late fifteenth-century French ones, it should be still more so that there is only indirect testimony of the appearance of English-made glasses during the greater part of Mansel's career in the first half of the seventeenth century.

It is not surprising that the art so successfully practised in France should have soon been carried on in England, and it is fitting that the earliest and finest examples of English picture windows should be in Canterbury Cathedral: there seems strong reason for believing that their date is not later than the middle of the last quarter of the twelfth century. The importance of this fixture is obvious, because, inasmuch as we have seen that glass-making in England was alternately in a declining and a reviving condition during the whole of Anglo-Saxon times, we now find from the windows at Canterbury that it was flourishing here in great vigour and perfection at the end of the twelfth century. A high condition of the art, thus verified, implies a season of practice and training in England of such a length as to carry back the reintroduction of glass-making to within measurable distance of the Conquest, or, speaking more strictly, to the end of the unsettled period

which followed that vigorous military movement. During this time peaceful pursuits were naturally more or less hampered or laid aside, and it may consequently be assumed that it was not before the middle of the twelfth century, and, in fact, until the reign of the great monarch Henry II. (1154-1189), that the glass-making industry was again established here, at a time when other arts underwent a permanent improvement. That this condition was brought about by the large commercial intercourse with France which followed Henry II.'s acquisition, through his marriage in 1151, of the Duchy of Aquitaine, in addition to the vast dominions beyond the sea to which he succeeded in right of his father and of his mother, and the consequent command of the French coast from Picardy to the Pyrenees, there can be little question, and it is a remarkable fact in the history of the art of glass-making and painting, that while Suger's glass at Saint-Denis is of the middle of the twelfth century, that at Canterbury, not much later in character, is no earlier in date than of the extreme end of it. As has been already stated, the significance of these conditions is that, whereas at the end of the twelfth century we were nearly fifty years behind France in the art of painted windows, as regards style of architecture we were greatly in advance of that country, as the undoubted date of the work of St. Hugh at Lincoln testifies.

The art of glass-making and painting having been thus acquired from France about the middle of the twelfth century, it was assuredly at first mainly produced in this country by Norman hands, or under Norman direction; it must therefore be impossible to pronounce with absolute certainty upon the nationality of much of the painted glass in England which may be safely assigned to the first half of the thirteenth century, such, for instance, as the splendid rose window in the north transept of Lincoln, the remains of a *Jesse* in a window on the north side of the nave clerestory at York, and the pattern windows in Salisbury Cathedral. But whether by Norman or English hands, these are pronounced by the competent authority of Mr. Winston to be productions of the English school. Without attempting to indicate with precision at what time the English artificers finally shook off their foreign instructors, it may be assumed that it doubtless took less than half a century for the learners to acquire all that their teachers could tell them. The mention of Salisbury reminds us, only too vividly, of the shocking destruction which has taken place of those precious English works in glass now known to us only by fragments; and not only is wanton havoc to be deplored at Sarum, but throughout the country, and of all periods, making it impossible to form anything approaching to a connected series of complete examples of the

English glass-painters' art. Entries could be quoted from documents respecting the introduction of painted windows into castles and houses in the hands of the Crown, by the usual means of mandates to sheriffs; and from Fabric Rolls concerning the purchase of glass, both white—so-called, it was more or less green—and coloured, for great monastic churches, such as the Abbey. But it must be sufficient for the present purpose to bridge over with wide steps the centuries during which glass was principally made in England for windows, and only, as far as we may assume, to a very moderate extent in the form of vessels for general domestic uses.

As we descend the stream of time and leave the fascinating Early English epoch, the greatest of the "good old times," examples of window-glass, both pictorial and heraldic, increase and crowd in; of the latter kind, which belong specially to the Decorated period, are the Dene window at York, the striking figures of the De Clares and Despencers in Tewkesbury's solemn Abbey Church, all wearing ailettes and carrying lances, and showing some French influence in the details of the armour, and, quite late in the style, the great Cressy window at Gloucester—naturally a purely English work, and apparently, from heraldic evidence, set up by Lord Bradeston between 1347 and 1350. All these are notable examples of the high point of excellence to which glass and glass-painting was pushed before the middle of the fourteenth century by English artists.[1]

That glass was still sent from France, in honourable rivalry with native work, we know from documentary evidence concerning the purchase of glass from Rouen in 1317, for Exeter Cathedral. It is possible, also, that some of the early Decorated glass in the Abbey, and in Merton Chapel, Oxford, came from France.[2]

[1] Edward III. began the rebuilding of St. Stephen's Chapel at Westminster in 1330. The expense rolls show that when the work was so far advanced that steps could be taken for obtaining and painting the glass for the windows, the whole of it was procured in England, by means of writs to sheriffs (1349-1351), in no less than twenty-seven counties, including Surrey and Sussex, of course, Lincolnshire, Derbyshire, and the distant duchy of Cornwall. This shows to what a large extent glass was then made in England. It should be noticed that the best glass was required for the royal chapel, and not a word is said about glass from "beyond the seas." Master John de Chester, and his five assistant master glaziers, drew the "images" for the glass windows on white tables, each receiving 1s. a day. Eleven painters at 7d. a day laid the glass on the tables, and painted it, and fifteen others cut, broke, and joined it together, at the wages of 6d. a day, with assistants who were paid at the rate of 4½d. or 4d. John Geddyng washed the tables with "servicia" and whitening from time to time as fresh surfaces were required for the drawings, and Thomas de Dadyngton and Robert Yerdesle ground the colours at the wages of 4½d. a day. White, blue, azure, and red glass was bought by the "pondus"; blue, red, and azure coming by water from London to Westminster, and much white glass from John de Alemayne at Chiddingfold in Surrey.—J. T. Smith, *Antiquities of Westminster*, pp. 83, 191, edit. 1807.

[2] Winston, *ut sup.*, p. 171.

The introduction of the yellow stain, quite in the beginning of the fourteenth century, certainly gave an impulse in a new direction to glass-painting in England; and after the middle of the century a great change took place in the manufacture simultaneously with the alteration in the manner of painting it. Wykeham's glass at New College is an early instance of the new style.

Light and delicate shading, and a large proportion of white glass with the figures standing against dark backgrounds under white and yellow-stained canopies, signalise the continuing development of Perpendicular glass between 1360 and 1380, as well as mark its progress towards the perfection which it reached as an English pictorial art at the end of the first quarter of the sixteenth century. Its native origin is absolutely borne out by the evidence of armour and costume. Every style has its beauties, and if the later Perpendicular glass lacks somewhat of the peculiar vigour and deep colouring of the thirteenth, or the gem-like brilliancy of the early fourteenth-century glass, we may always recognise with thankfulness that the latest architectural style, as it expanded from its cradle at Gloucester, was so happily met by the native glass-painters. The choir of York may stand as warrant of this statement.[1] And, taken as an artistic whole, what more beautiful thing than a genuine Perpendicular window with its genuine glass!

The oft-quoted extract from the covenant of 1447 between the executors of the Earl of Warwick, "Brass Beauchamp," and John Prudde of Westminster, for the glazing of the windows in the Beauchamp Chapel, stating that Prudde should use glass of "beyond the Seas" and "no Glasse of England," has been frequently put forward in proof of the inferiority at that time of the English metal. But, as a matter of fact, there is no superiority in this glass over other windows of the same period elsewhere in England; it differs in no respect from them, and is nothing more than an average example of the time.[2] Prudde was, indeed, limited by his contract as to his use of white, green, and black glass, but the quantity of white and green that he used is very considerable, and there is no black glass at all; and while this tends to show that he exercised his own discretion in the matter, it is not improbable that he also did so with regard to all the coloured glass and its nationality, for he evidently had better taste than his

[1] See Drake, *History and Antiquities of York*, p. 527, edit. 1736.

[2] Winston, *ut sup.*, p. 339. The preparation of his paper on the Painted Glass in the Beauchamp Chapel, Warwick, was among the last labours of the accomplished author, who was snatched away in his prime by a sudden stroke, 3rd October 1864, to the grief of all who had enjoyed the friendship of so genial a spirit.

employers. He was not required by his contract to procure his coloured glass direct from abroad, but to get the best foreign glass he could in England. It remains to be pointed out that there is nothing in the nature of any of it which could enable a critic to say that it is French or Flemish glass because it is either better or worse than English.[1]

[1] The windows of King's College Chapel will be alluded to under another head later on.

CHAPTER IV.

ENGLISH MEDIAEVAL GLASSES—PHIALS—SILVER AND OTHER DRINKING CUPS OF THE UPPER CLASSES AND OF THE COMMON PEOPLE—ORIENTAL GLASSES IN ENGLAND—VENETIAN GLASSES—HENRY VIII.'S COLLECTION—WILLIAM MORE'S GLASSES—EARL OF LEICESTER'S GLASSES.

THE object of the above cursory remarks upon glass-painting in England has been to show the re-introduction of glass-making, and the continued practice of the manufacture from the middle of the twelfth to the beginning of the sixteenth century. But the author is aware of the statement put into print in 1851, "that there is not a particle of evidence to prove that any description of glass was manufactured in this country before the fifteenth century."[1]

During the long period alluded to above it is too true that we have but one certain record of the making of glass vessels, and only the slightest material indications, very far from sufficient, it must be confessed, to amount to an absolute warranty of such manufacture in England side by side and continuously with that of window-glass; English-made mediaeval glass cups, which might have been painted and stained like the windows, as well as mere crude "vessel," are, in fact, even rarer than examples of English-made pottery during the same period. The one art in question, more fragile, certainly, than the other, and probably always less in quantity, has perished and left barely a trace. Yet it is almost inconceivable that the makers of blown, and not cast-glass for windows—such as, for example, the "verrers" of Colchester of the end of the thirteenth and the early part of the fourteenth century must have produced[2]—did not constantly turn their hands

[1] Hudson Turner, *Domestic Architecture in England*, vol. i. p. 75 (1851).

[2] Introd., *Slade Cat.*, p. xxxii. The town which enjoys the unique privilege of having its earliest days recorded by the hand of Tacitus is as likely, from its local conditions, as any other in Britain to have had glass-works in Roman days from the time when the Colony of Veterans was established there. In no place in this country did Roman influence strike deeper, or has at the present day more living witnesses; and it was the opinion of Dr. Guest that of all the towns in

to the fashioning, if not of decorated, at least of simple drinking-vessels such as were being made in the Weald in 1380. On the other hand, unfortunately, we may perhaps be as certain as we can be about anything that, with the exceptions presently to be mentioned, no glass drinking-vessels presumably made in England during the twelfth and three following centuries have come down to us. It is rather humiliating.

The antiquity of glass-making at Chiddingfold, in the Weald, has been well ascertained by the Rev. T. S. Cooper from documents. Laurence Vitrearius had a grant of twenty acres of land in Chiddingfold about 1230. In a deed of 1301 a certain rent in the parish was released to William, son of William le Verir of that place. During the fourteenth century four generations of the local family of Schurtere followed the occupation of "glasieres," *i.e.* glass-makers, in Chiddingfold and Kirdford. On 3rd April 1380 John Glasewryth of Staffordshire had a grant of house and land in Shuerwode, Kirdford, and there made "brodeglas" and "vessel."

Between 1214 and 1222 Abbot Robert de Lyndeseye[1] gave part of his "vineyard," at the east end of the Abbey Church of Peterborough, for the extension of the burial-ground of the monks. This portion was just outside the Saxon wall of the close, due east of the Norman choir. At the end of the fifteenth century the church was extended eastward by the New Building, of which the east wall was planted upon the Saxon wall of the close. In 1876 a drain was carried for the first time outside and round this east wall, and in the course of the necessary excavations several coffins of Barnack rag were found and exhumed, but they are said not to present characteristics sufficient to mark their date. This is very likely, because stone coffins were necessarily kept in stock, and their style did not alter during long periods. In one of such coffins, placed almost central with the axis of the church, was found a bluish-green glass cup, $2\frac{1}{2}$ inches high, and $3\frac{1}{2}$ inches in diameter, with a strip of glass attached on one side horizontally just below the rim, and so waved as to leave two orifices through which a thin cord could be passed (Fig. 147).[2] No burial could have taken place in this portion of the vineyard before its grant to the monks by the abbot; and it is probable that the central position was chosen for the interment of some one more important than

England none was more likely than Camulodunum to have been continuously inhabited through British, Romano-British, and English days. The fourteenth-century *verrers* of Colchester may, therefore, have lineally represented glass-makers of Roman, Anglo-Saxon, and Norman times.

[1] His bearded effigy in Purbeck marble in Peterborough Cathedral shows the abbot vested in alb, chasuble, maniple, and amice.

[2] *Proceedings, Society of Antiquaries* (Scot.), vol. x., N.S., p. 149. Paper by J. T. Irvine.

a common monk, soon after the grant. This would, therefore, take back the date of the vessel in question to the first half of the thirteenth century.

It is impossible to say whether it originally contained relics, like the glass found in the altar at Michelfeld,[1] or was, as is more likely, only an attribute of the position held by the dead man, perhaps the *taster* of a *cellerarius major*, an important office-bearer in a convent, to be suspended by a cord from the girdle, for assaying the liquor at the hogshead in the cellar; not a "spare pece" for use in the refectory in view of the ever present dread of poison in mediaeval times. It may be taken for granted that the cup was nearly new when deposited in the coffin, and there is no reason why it should not be of English manufacture. It is by no means clear glass and has many air-bubbles. The abbot who granted part of his vineyard as a burial-ground at Peterborough filled with glass thirty of the church windows, which had previously been stuffed with straw;[2] the cup may have been brought to Peterborough at that time. Its general resemblance in shape to Roman glasses of the fourth century painted in enamel with animals, that have been found in Denmark, and to the plain examples from cists in Forfarshire,[3] also of the Iron Age, must be accidental (Fig. 148).

Fig. 147. (One half.)

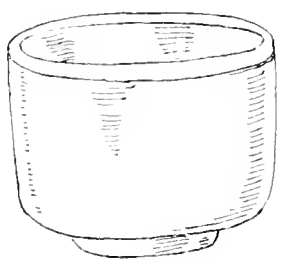


Fig. 148. (One half.)

In the Accounts of Henry, second son of Edward I., who was born in 1268, died in 1274, and was buried in the Abbey, is the entry of a glass cup bought for twopence halfpenny. Having been bought, and for so small a price, and not sent as a present in the usual mediaeval way, this was probably of English manufacture.[4]

The use that was made during the Middle Ages of hollow tubes both of crystal and of glass for the preservation and exhibition of relics, and their elaborate mountings of gold and silver, and of glass vessels for special church purposes, is well known, and they are constantly alluded to in inventories. Among such venerated objects the precious oil of certain saints—St. Catherine, St. Nicholas, St. Mary of Sardinia, and others—occurs, spoken of as contained "in a glass," "in a glass vial," "in a vial of crystal." We gather some information concerning the form which such vessels may have taken in their use in England from three

[1] See Introductory Notices, p. 34.

[2] Albert Hartshorne, *Recumbent Monumental Effigies in Northamptonshire*, p. 54.

[3] *Proceedings, Society of Antiquaries* (Scot.), vol. viii., N.S., p. 136.

[4] In the *Wardrobe Accounts*, of 28 Edward I. (1300), the entry occurs of the purchase for the King of "duo urinalia vitrea." These were perhaps also of English make. Introd., *S. K. Cat.*, p. lxxij. (footnote).

examples, closely resembling each other, which were discovered respectively the one in the east wall of the Church of St. Nicholas, South Kilworth, Leicestershire, in 1868, and the other two in the west wall of the north aisle of St. Mary's, Lutterworth, in 1868 or 1869 (Fig. 149). All three vessels had contained oil; they were perhaps merely deposited for safety where they were found, at the time of the Reformation, and may be dated about the middle of the fifteenth century.[1] They stand almost alone in the circumstances of their discovery, and if we may assume that they are examples of English glass, they have a special interest with reference to the present inquiry. It can readily be imagined that these little "monuments of superstition" were plucked away from their silver-gilt mountings, and cast aside to be reclaimed by pious hands, and secretly hidden in the sacred walls, not as their ancient preservers hoped, soon to be reinstated in honour, but to rest undisturbed, the phials by flux of time becoming more valuable than their once cherished contents, and finally marking a point in an obscure chapter in the history of an art centuries after their deposit. These slight examples appear to show a manufacture of glass vessels for ecclesiastical purposes in the fifteenth century which one is tempted to believe was English, because they are not choice objects, and their use was so common that it is improbable that they would have been imported into a country where glass was largely made.

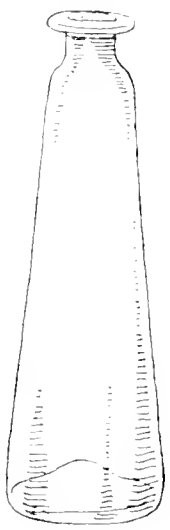


FIG. 149. (One half.)

A phial of a very similar character to those already mentioned, but belonging to a different category, was found in 1866, imbedded in the east wall behind the altar of the church of St. Phillack, Cornwall, half filled with a substance believed to be the blood of St. Felicitas. From the position in which it was reposed it is said not to be later than the twelfth century.[2] This seems to require confirmation. Another phial was found in 1872 in a prepared cavity in the outer side of the south corner of the east wall of the chancel of Anstey Church, Hertfordshire (Fig. 150). Chemical analysis showed the remaining fluid in the vessel to have been blood.[3]

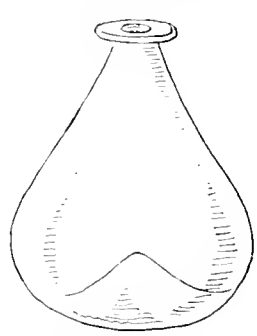


FIG. 150. (One half.)

Mr. Powell was of opinion that, from their peculiarity of manufacture, the phials from South Kilworth and Lutterworth were ancient.[4] On the other hand, Dr. Fowler classed them with seventeenth or eighteenth-century bottles, used to a

[1] *Proceedings, Society of Antiquaries* (Lond.), 2 S., vol. iv. p. 284; vol. v. pp. 114, 132.

[2] *Ibid.*, vol. v. p. 135.

[3] *Ibid.*, vol. vi. p. 390.

[4] *Ibid.*, vol. v. p. 135. Mr. Powell's opinion is borne out by a drawing of a thirteenth-century glass phial in MS. Douce, 180, Bodleian.

large extent in accordance with certain well-known, widespread, and very queer medical superstitions—buried magical remedies in churchyards, wall roots, under hearth-stones, door-sills, etc., against sickness, witchcraft, demons, and other troubles. He based his conclusions upon the absence of granular decay of any kind in the glasses.[1] This is a test which, it seems, may easily be pushed too far, inasmuch as the decay of glass is largely influenced by circumstances of contact and surroundings, more so than by the flight of time; but it will never be easy to distinguish with certainty between ecclesiastical and magical relics. Another example of a glass phial was found under the pavement of Lapworth Church, Warwickshire.[2] Tubes of glass were used to enclose thorns from the Crown of Thorns. Such a relic is at St. Mark's, Venice, and another at the abbey of St. Maurice in the Valais, under the frowning heights of the Dent du Midi. Both were the gift of Saint Louis.[3]

An example of a drinking-vessel for secular use may be quoted from a MS. of the middle of the fifteenth century,—"How a man schalle be armyd at his ese when he schal fighte on foote." Among the articles enumerated as necessary for the Appellant and the Defendant to have with them in the field are, "a cuppe to drynke of" and "a glas with a drynke made."[4] It is hardly likely that a precious "Damas" glass would have been used in such rough amusements as "joustes à plaisance," or that glasses of the common sort, which any glass-maker could fashion, were imported. The "glas with a drynke made," of which, unluckily, no drawing is given in the MS., may therefore be taken to have been English; and it will not be too much to infer, from its mention under such circumstances, that the use of rude native-made drinking-glasses—the "vessel" of the Weald—was fairly established here in the middle of the fifteenth century. It should be suggested that such drinking-vessels must have partaken of the simple character of the small glass cups that appear in the early Low Country pictures, but of which England can produce no corresponding pictorial records.

In a fifteenth-century MS. in the Bodleian—Douce 219—two glass tumblers are shown, the one vertically fluted, and the other ornamented with diagonal bands (Figs. 151, 152). These bear out the view just expressed as to the appearance of the glass in the jousts alluded to. In the same MS. a glass jug with a handle, and following the general form of metal household vessels of the time, is

[1] "Decay of Glass," *Archæologia*, vol. xlvi. p. 132.

[2] *Proceedings, Society of Antiquaries*, 2 S., vol. vi. p. 390.

[3] Introd., *S. K. Cat.*, p. clix.

[4] *Archæological Journal*, vol. iv. p. 235.

depicted. In 1465 sixpence was paid for a bottle of glass at Ipswich.[1] This was probably English also.

With further regard to the reasons why neither choice nor common glass cups appear to have been made and generally used in England, during so great a part of the long period in which the art of painted glass was successfully practised here, it must be borne in mind that the rude habits of secular life, even among the highest classes, where were many gentlemen but little gentleness, were not such as to render fragile vessels of this kind acceptable, at least, as has already been suggested, not before the last quarter of the fourteenth century. The valued glasses from the East must have been regarded more as mysterious curiosities and ornaments for the sideboard than as vessels for use, and their shapes were so much at variance with the traditional and requisite form of the chalice as to preclude their being offered for use at the altar.[2] The glass coffin chalice from Liège is a departure from general rules. But, specially, the rough conditions of living in England repelled the idea of native imitations, however imperfect, for ordinary service, of such frail wares, while they forbade the general employment even of simple English-made glass cups for domestic use much before the middle of the fifteenth century, and then only to a very limited extent, and in the same crude inartistic forms as those of the Low Country glasses previous to the influence of the Venetians and Altarists.

FIG. 151.

FIG. 152.

Moreover, a semi-barbaric splendour, coarse abundance, whimsical variety, and stately parade were better promoted and enhanced by massive cups and

[1] *Domestic Architecture in England*, vol. iii. p. 159.

[2] Glass chalices, which were sometimes decorated with painting, were forbidden in 895 on account of their fragility, and doubtless also for fear of the use of their fragments for purposes of magic; but they were not wholly discontinued because glass fell into the category of molten materials, such as gold and silver, which were enjoined to be used. Pope Zepherinus, 197, ordered glass instead of wooden chalices, and St. Ambrose employed the former for a time. Horn was naturally discarded because blood had entered into its composition, and wood on account of its absorbent quality; copper was objected to "quia provocat vomitum," brass "quia contrahit rubiginem"; but the use of tin or pewter is thought not to have been infrequent in poorer churches. The latter metals are common enough for use in the symbolical "coffin chalices."—See *Archæological Journal*, vol. iii. p. 129, "Notices of Ancient Ornaments, Vessels, and Appliances of Sacred Use," by A. Way.

The lower portion or foot, up to the under side of the knop, of a very delicate glass chalice was found in a coffin of an ecclesiastic of the end of the fourteenth century, in the ancient collegiate church of St. John the Evangelist at Liège, together with a small glass reliquary. Both are preserved in the Musée Archéologique in the Palais des Princes Evèques at Liège. See Introductory Notices, p. 35.

vessels of gold and silver of far larger size than could then be attained in glass.[1] With these—besides great silver spice-plates, dishes, plates, and salts, and silver-harnessed horns, gripes' eggs, nuts, and cups of agate, crystal, etc.—the great men and women surrounded themselves with a profusion which is quite astonishing. For instance, when the youthful Princess Elizabeth, Countess of Holland, went to Flanders with her husband and her illustrious father in 1297, she took with her no less than sixty-one silver-gilt cups, some with feet and covers, in addition to a quantity of other plate, but not one piece of glass.[2] The silver and silver-gilt plate of Sir John Fastolfe, who died in 1459, amounted to eighteen hundred and ninety ounces, besides his gold plate; one silver flagon alone weighed three hundred and sixty-eight ounces. With "this intolerable deal" of plate were but "ij lyttyll Ewers of blewe glasses powdered with golde,"[3] no doubt Venetian.

As to the drinking-cups of the common people in England during the later Middle Ages, their case was, perhaps, not harder in this respect than was consonant with the appalling squalor of their lives and their dreary, hopeless surroundings.[4] For them were vessels of wood—*treen*, of horn, and of leather. The use of the latter also among the better classes gave rise to the report, long believed in

[1] Such were the hanaps of silver which Kings occasionally presented to favourites filled with nobles. Richard II. at Windsor gave a silver cup charged with a hundred nobles to Froissart in 1395, after his visit to the king at that very peculiar structure Ledes Castle in Kent.—Johnes's *Froissart*, xi. c. 24; xii. c. 32.

On the panels of triptychs and fifteenth-century church screens, and in other early pictures of the Adoration of the Magi, one of the three is frequently shown as lifting off the cover of a great golden cup, and presenting it filled with bezants. Thus does Balthazar, the Ethiopian king, in Luino's beautiful fresco in the church at Saronno, justly famous also for the superb works of Gaudenzio. In Mabuse's wonderful picture of the same subject at Castle Howard, Gaspar has offered a golden chalice held by the Virgin, and from which the Son of God has deigned to take a coin. It was a picturesque episode which the painters would naturally seize upon and elaborate. The representation of such ancient mark of homage lingered in art long after the custom had been abandoned in actuality in courts. In Rubens's picture of the Adoration of the Magi in the Louvre the fingers of the Divine Child, with admirable artistic unity and spontaneity, incontinently toy with the gleaming bezants in the golden bowl offered by the white-bearded Gaspar. The golden ciboria, cups, and bowls, containing the frankincense and myrrh, are shown in art as presented covered. Miss Strickland, in her amusing *Lives of the Queens of England*, vol. vii. p. 398, edit. 1841-1848 (no index), says that "silver cups heaped with gold angels" were given by "the northern cities" to Queen Anne on her progress to London in 1603. One would have been glad of an authority for this statement, it seems a late date for the practice, and rather improbable.

[2] C. H. Hartshorne, *Illustrations of Domestic Manners during the Reign of Edward I.*, p. 35—reprint from *Journal of British Archaeological Association*.

John de Weston was appointed attorney for the princess and had charge of these valuables. He is represented in his wooden effigy in Weston Church, Shropshire, wearing a purse dependent from his sword belt, in token of his official position.

[3] *Archaeologia*, vol. xxi. p. 269. See Appendix, Inventories, No. I.

[4] See *Archaeologia*, vol. xxx. p. 205, "On the Political Condition of the English Peasantry," paper by T. Wright; and "The Coming of the Friars," *Village Life Six Hundred Years Ago*, p. 53, edit. 1889, by the Rev. A. Jessop, D.D.

France, that the Englishmen drank out of their boots.[1] We may be sure that such cups were far removed in style from the handsome silver-mounted black jacks of the seventeenth century. Other drinking-vessels were of the coarsest pottery, degenerate representatives of the *figuli* and *potarii* of Domesday, the homely *cruskyns de terre* of the fourteenth century, long made in England, and also imported in the fifteenth century from Holland. The shapes of these things may be fairly gathered from the rare examples which are preserved in the British Museum, and the representations of their lineal descendants in seventeenth-century Dutch pictures of low life. Of glass drinking-vessels in the miserable homes of people who could not have silver ones, there cannot have been a trace. Ill-clad, ill-fed, ill-housed, and oppressed, how could they even have had the wish to possess the cleanly objects which at the present day are the absolute necessities of the very humblest? We shall see in working the subject down through the ages how the change was gradually brought about.

Alluding again to Eastern glasses in England in the thirteenth and following centuries,—Henry III. had one given to him, in 1244, by Guy de Rousillon, probably obtained direct from the East or from Limoges. This the King valued so highly that he ignorantly sent it to Edward of Westminster, the goldsmith, with orders to remove the glass foot and to replace it with one of silver-gilt, to hoop it with silver, and to present it on his behalf to the Queen.[2] He treated it as a cup of rock-crystal.

A fourteenth-century Damascus glass, enamelled with an Arabic inscription,

[1] With regard to the drinknig-vessels of all classes in the early part of the seventeenth century Heywood, in his *Philocothonista*, 1635, p. 45, says: "Of drinking cups divers and sundry sorts we have; some of Elme, some of Box, some of Maple, some of Holly, etc., mazers, broad-mouth'd dishes, noggins, Whiskins, piggins, cruizes, ale-bowles, wassell-bowles, court dishes, tankards, Kannes, from a bottle to a pint, from a pint to a gill. Other bottles we have of leather, but they are most used among the shepeards and harvest-people of the countrey: small jacks wee have in many ale-houses, of the citie and suburbs, tip't with silver, besides the great black jacks and bombards at the court, which when the Frenchmen first saw, they reported, at their returne into their countrey, that the Englishmen used to drinke out of their bootes: we have besides, cups made of hornes of beasts, of cocker-nuts, of goords, of the eggs of Estriches, others made of the shells of divers fishes brought from the Indies and other places, and shining like mother of Pearle. Come to plate, every taverne can afford you flat bowles, French bowles, prounet cups, beare bowles, beakers; and private householders in the citie, when they make a feast to entertaine their friends can furnish their cupboards with flagons, tankards, beere-cups, wine bowles, some white, some percell guilt, some guilt all over, some with covers, others without, of sundry shapes and qualities."

[2] Close Roll. 29 Henry iij. m. 18.

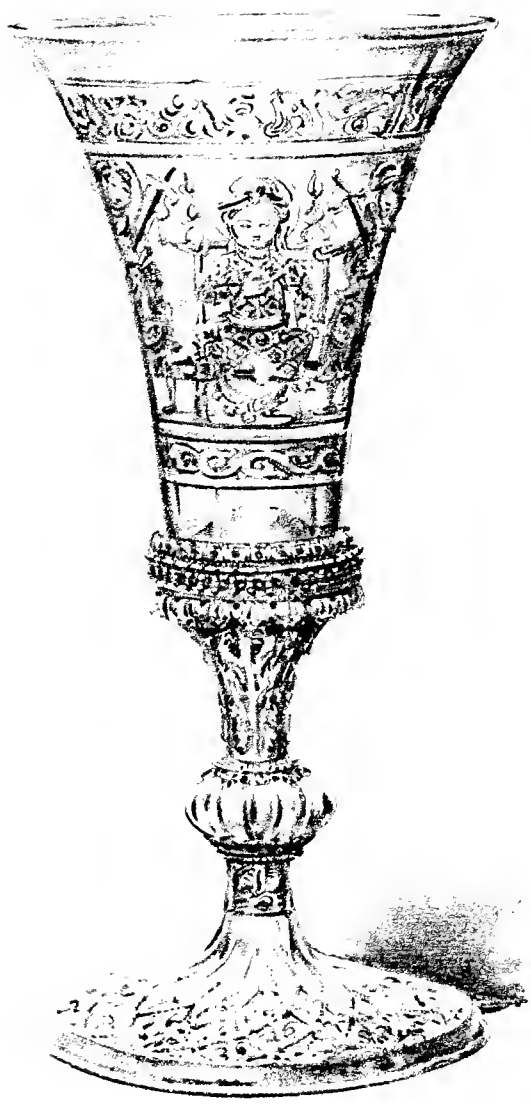
D̃ j cuppa vitâ repanda.

R mittit Edwardo de Westm̃ unam cuppam vitream quam Regi misit Gwido de Russilun Et mandatum est eidem Edwardo q̃d amoto pede uitreo quendam pedem argenteum decentem ꝛ deauratum loco illius pedis vitrei ꝛ quoddam pomellum desup respondens eidem pedi ꝛ ĉc̃los deauratos ꝛ decentiores in ea sub quanta potit festinat̃oẽ fieri ꝛ eam sic paratam Regine ex pte Regis presentari fac̃. Et cum R̥ custum scindit illud acquietari faciet.

(A.D. 1244.)

T̃ ut s̃ (*i.e.* ꝛ R̥ apud Merleberg̃ xxviij die Noũ).

23.—ORIENTAL GLASS.



22.—ORIENTAL GLASS.

part of it extolling the beauty of the cup in the hand of the slender cup-bearer, and six allegorical figures, and mounted on a silver-gilt late fourteenth-century chalice-wise foot, apparently French work, with a knop in rock-crystal, was sold at Christie's, 17th July 1893, for £1732 : 10s., an excessive price. This beaker-shaped cup had long been preserved in the Palmer-Morewood family, but there was no history attached to it (Plate 22). It much resembles the Oriental glass said to have been given by Haroun al Raschid (756-809) to Charlemagne, preserved in the Library at the Hotel de Ville at Chartres, which is also a Damascus glass but not anterior to the middle of the thirteenth century.

The well-known "Luck of Edenhall" is a Saracenic glass of the early part of the fifteenth century, richly enamelled all over in arabesque patterns in red, blue, yellow, and white. Its leather case is later, and English work; it is impressed with alternate vertical bands of leafy and plain scrolls, and on the lid is the sacred monogram. This glass assuredly is not, and never has been, an ecclesiastical vessel; its shape is the usual one of civil cups of its origin and period, and it is exceptional only in not having been mounted in silver. Apart from the veneration in which it has so long been held, and the peculiar and pardonable superstition that has grown around it,[1] it is a highly interesting survivor of a class of greatly valued cups, many of which must have come to England during the fourteenth and fifteenth centuries, because local talent could not, or rather did not, attempt to furnish works in glass of so high a quality (Plate 23).

Edward III. possessed in 1338 a "gourde" of glass supported on snails, noted as "niente prise," possibly English; in 1371 he had a glass described in the inventories as "un warre de wildchien."[2] Henry IV. in 1399 had a little vessel or pot for "theriacum" of silver-gilt, with a glass of Alexandria, a "verre de glass," and another "verre de glass," painted on the outside, with a cover of silver-gilt. It is noteworthy that in the same year, and only twelve days before his

[1] The story is that the prosperity of the house of Musgrave depends upon the preservation of the glass. It seems that the butler, in vague days of yore, having gone out one night for water from St. Cuthbert's Well, surprised a company of fairies dancing on the lawn. They had been drinking at the fountain, and had left their cup behind them. This the worldly and irreverent butler seized and refused to give up. Whereupon the queen of the fairies advanced and uttered this ominous couplet—

If e'er that glass should break or fall,
Farewell the Luck of Edenhall.

No antiquary would grudge the ancient house the delightful romance which has preserved so valuable a glass up to the present day.

[2] Mr. Nesbitt, Introd., *S. K. Cat.*, p. cxxxiii., footnote, suggests that this may have been a glass made in some place called the little wood or *wäldchen*. Nothing is more likely, and it is probable that it formed part of the effects brought over by Philippa of Hainault.

deposition on 29th September, Richard II., being then in the hands of Duke Henry of Bolingbroke in Chester Castle,[1] granted permission, by Letters Patent—"teste me ipso apud Westm̃"—to the masters of two Venetian galleys arrived in the port of London, for the passengers to sell on the decks small glass vessels and earthenware plates duty free.[2] This opens a new era, and is the earliest intimation that we have of the advent of glass vessels from Venice to England. The time nearly coincides with that of the record of a similar arrival in the Low Countries, for in 1394 Philip le Hardi, Duke of Burgundy, paid for "seize voirres et une escuelle de voirre des voirres que les galères de Venise ont avant apportez en nostre pays de Flandre."[3] Venice glasses must have been well known in Flanders by importations half a century earlier.

The "Luck of Muncaster," preserved in the strong-room at Muncaster Castle, is a glass bowl which may well be as old as the middle of the fifteenth century. Tradition has invested it with the unique historical interest of having been presented to Sir John Pennington by Henry VI., on the occasion of his being sheltered at Muncaster after the battle of Towton in 1461, or in 1463 after the battle of Hexham. The account is well borne out by the character of the bowl, and is so far supported by a small picture on panel which represents the King holding the Luck in his left hand, and presenting it with two fingers of the right hand upraised in benediction, as he pronounced the blessing on the ancient family so long as the vessel remained unbroken. A larger picture, apparently in distemper, representing this incident was unhappily destroyed by some alterations in the castle. The glass bowl, which is $5\frac{1}{2}$ inches in diameter, and $2\frac{1}{2}$ inches high, is of a pale green tint, and there is no reason for thinking that it is of English manufacture. It is ornamented with a row of white dots on a gold band, and a row of gold billets below it, the two being comprised within two bands of pale purple dots in sets of three, after the usual Venetian method. The lower part of the bowl is roughened or frosted of a brownish colour in a manner sometimes seen in Venetian glasses (Fig. 153).

A claimant to the Luckship of Muncaster is in the possession of Mr. Thomas Clutterbuck. This is a horny tinted glass of remarkable lightness, not thin, and from the character of the French inscription probably of Flemish origin. It is said to have passed from Muncaster in 1756 by the marriage of Elizabeth Pennington with Farrer Wren. It descended to Mr. Charles Lyon of Binchester,

[1] *Archaeologia*, vol. xx. p. 173. Deposition of Richard II.

[2] *Calendar of State Papers*, Venetian, 1399-1400.

[3] See Introductory Notices, p. 35.

24.—FLEMISH GLASS.

and came from him by bequest to the present owner. The glass is a very interesting one on its own merits, and may have come from Muncaster, but it cannot be older than the first decade of the sixteenth century. The costume of the two figures sufficiently shows this, if the style of the inscription and the form of the glass did not point to the same conclusion (Plate 24). So has another *soi-disant* memento of Henry VI.—"the Pudsey Spoon"—been of late years degraded in its date from 1445-46 to 1525-26, by the inexorable logic of Hall Marks. Such are the painful mischances of historical relics, and how few will bear the test of critical examination![1]

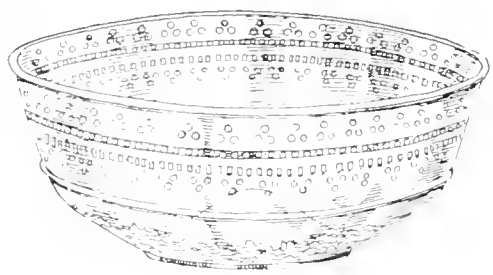


FIG. 153.

At this point we meet with a remarkable vase in emerald-green glass, of a form called an *olla* in a pictorial vocabulary of the fifteenth century, $7\frac{1}{2}$ inches high, and at once recognisable from illustrations of pottery vessels in Illuminated MSS. of the same period.[2] On one side is somewhat coarsely presented a portrait in enamel thought to be of Edward IV., and on the other the royal arms of England, as they were borne from 1405 to 1603, ensigned with a coronet. This interesting relic, in the possession of Colonel Goodall, has been preserved in his family for many generations, and though there can be little doubt that it is of Venetian manufacture, it may well have mention here on account of its historical character. It will be remembered that the east window of Little Malvern church still contains the figures in painted glass of Edward, Prince of Wales, afterwards Edward V., and of the Princess Elizabeth of York and three of her sisters, set up by the Chancellor-prelate, John Alcock, between 1480 and 1482.[3] Unfortunately, four of the lights have perished, and among them that which contained the portrait of Edward IV. It is, perhaps, not an extravagant suggestion that the vase may have been made and painted by order of Chancellor Alcock, for presentation to the King at the time the Malvern windows were set up. It is to be noted that the King wears in his portrait on the vase "hys ryghtefull imperiall crowne," the arched crown which first appears on the seal of Edward IV., and which is spoken of by Thomas

[1] The Luck of Burrell Green lacks the essential quality of Lucks, namely, fragility. It is a brass charger, 16 inches in diameter, of late sixteenth-century character, inscribed round the central "wrythen" flutes in black or late Gothic letters—**Mary Mother of Jesus Saviour of Men.** This is again circumscribed by the words in modern block letters—**IF THIS DISH BE SOLD OR GI'EN, FARE-WELL THE LUCK OF BURRELL GREEN.** Such a *travestie* of picturesque antiquity tends to shake the faith in luck altogether.

[2] MSS. Douce, 219 and 311, Bodleian.

[3] *Archæological Journal*, vol. xxii. p. 302. Paper by E. Oldfield.

Habington in his description of the window in the time of Elizabeth—when all the figures were still in existence—as being worn both by the King and the Queen. Accuracy of likeness is not to be expected in such a medium as painted glass, but the face on the vase is, as usual in the authentic portraits of Edward IV., smooth and beardless, the eyes dark, and the hair long and flowing, as distinguished from the shorter and clubbed hair of Henry VII.'s time (Fig. 154).[1]

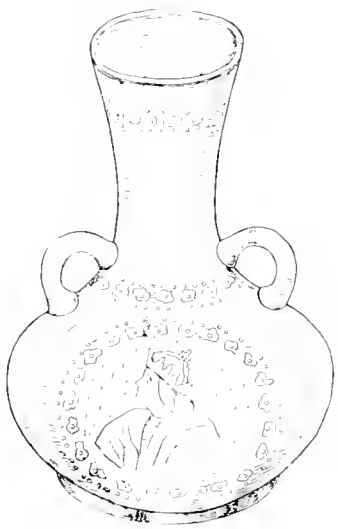


Fig. 154. (One third.)

In the inventory of the effects of the Countess of Richmond—"the venerable Margaret"—who died in 1509, the item of "glassery basons" occurs.[2] This sounds like Venetian work. In the list of the goods of Dame Agnes Hungerford, executed for murder at Tyburn in 1523, a "presse full of glasses with waters in them" is mentioned.[3] These were probably flasks of wholesome cordial waters, to be thriftily doled out in thimblefuls from the stilling-room, and very unlike the maddening fire-water so freely used in the nineteenth century.

The Venetian drinking-glasses which were introduced into England at the end of the fifteenth and in the early years of the sixteenth century—whether they came direct from Venice, or by way of Antwerp, together with Low-Country-made glasses of less artistic style, such as the claimant to the "Luck of Muncaster"—must nearly all have had the character of the somewhat heavy cups of late Gothic form. We know quite well what the shapes of some of them were from the few fortunately existing examples, and to a certain extent the character of others from the notices in inventories, and representations in early pictures.

Henry VIII. had a large number of choice glasses, and from the descriptions in his inventories of 1542,[4] as well as the fact of many of them being substantial and massive enough to be mounted in gold and silver, we must infer that the greater number in the collection were of the latest Gothic style—imitating as nearly as the rapid handling necessary in the totally different material would allow, the silver cups of the period; or, perhaps, not so strictly imitating them as following the general form of fifteenth-century drinking-vessels, as expressed

[1] Two portraits of Edward IV. are at Windsor, and two in the possession of the Society of Antiquaries. One of the latter examples was bequeathed to the Society, together with twenty-five other ancient pictures, by the Rev. Thomas Kerrich in 1828, into whose possession it came in 1787 on the death of Mrs. Harvey of Palgrave in Suffolk.

[2] Introd., *S. K. Cat.*, p. cxxxiv.

[3] *Archæologia*, vol. xxxviii. p. 366.

[4] *Archæological Journal*, vol. xviii. p. 134. See Appendix, Inventories, No. III.

by examples in the noble metals. Such were the immediate forerunners of the glasses of the time of the classical revival. In addition to those mentioned in his inventories the King had "a goblett of glasse with a foote of golde," and "a glasse with a cover garnished with gold,"[1] both evidently Gothic vessels. In 1529 fifty-three shillings and fourpence was paid for "a great glasse" for the King, and forty-five shillings in the following year for another "glasse."[2] It is improbable that any but Venetian glasses would at that time have merited the epithet of "great," or have been bought at such high prices, equal to from £20 to £25 of money of the present day; but "a great glasse" was possibly a Venetian glass looking-glass, and therefore included among Henry VIII.'s glasses instead of among the "Loking steele glasses" of another inventory.

A pair of glasses with elaborate gold stems and mullet-shaped feet, as well as another pair of somewhat similar gold-mounted glasses, from all of which the original glass feet seem to have been displaced by the goldsmith's work—a recurrence to an ancient practice—appear on a sideboard of three degrees, together with silver baluster-stemmed cups and small and thin early glasses, evidently Flemish, in a picture of a peacock banquet by "Velvet" Brueghel in the Palais des Beaux Arts at Brussels. Henry VIII.'s collection of glasses consisted of cups, such as the mounted ones just mentioned, flagons, pots, bowls, goblets, cruses, and layers. Their colours were generally jasper—the variegated chalcedony, the schmelz of the German—blue, green, many-coloured, probably millifiori or mosaic glass, white, gilt and diapered; several were garnished in various ways with silver. There were also glass spice-plates, trenchers, plates, dishes, saucers, candlesticks, casting bottles or sprinklers—guédoufles—to sweeten the evil-smelling rush-strewn floors, and forks with glass "steelis" or stails.[3]

The Account Book of William More of Loseley, of 1556,[4] contains a priced list of fifty-nine glasses in his wife's closet. The items respectively "emayled" white, and white and green, and gilt, may have been Venetian wares, but the prices both of these and of the humble glasses for waters, etc., offer a strong contrast with the rich objects in Henry VIII.'s inventory of half a century earlier. It is probable that some of Mrs. More's glasses were Flemish, for many were imported during the sixteenth century. If any of them were English,

[1] *Kal. Treas. Exchequer*, vol. ii. p. 285; quoted in Introd., *S. K. Cat.*, p. cxxxiv.

[2] Nicolas, *Privy Purse Expenses of Henry VIII.*, November 1529–December 1532.

[3] A word in common use in Northamptonshire for the handle of a fork or other agricultural implement.

[4] *Archaeologia*, vol. xxxvi. p. 288. See Appendix, Inventories, No. IV.

it can readily be imagined that they assumed at that time a crude beaker or tumbler form, like the glasses in the early Flemish pictures. Making allowance for the different handling necessary in the working of metal, a cloud of witnesses in silver of the latter part of the century—and not seldom articles of church plate among them—might be cited to show the shape, sometimes quite rudimentary,[1] that must have been taken by household glasses in England immediately after the middle of the sixteenth century. This would be before the influence of Edward VI.'s eight Italians of 1549 had been felt, and at the time when the proscribed "massing chalices" were being swept away and supplanted by "comely communion cups," and frequently, later on, by secular cups and hanaps taken direct by generous or conscience-stricken donors from their sideboards, and presented to the churches. The Elizabethan communion cups all over England bear such a general resemblance to each other as to suggest an authorised pattern. The particular shape and invariable ornament can hardly be accidental; they are distinct from the cups for secular use, and we have no record, tangible or otherwise, of glasses like them. In short, the type of the Elizabethan cup was as persistent, while it lasted, as that of the ancient "massing chalice," which had its fixed form of cup, knop, and foot, to which when the glass-makers approached—as they did sometimes in the later years of the fifteenth century—such shaped secular drinking-vessels were specified in inventories as "chalyswyse," or "ad modum calicis factum;" the entry in the list of Henry VIII.'s glasses of "two little standing cups with covers, chalice fashion, of glasse of many colours," is a case in point. Nevertheless, fifty-nine glasses was a large number for the establishment of a country gentleman of only fair estate like Sir William More, at that time, and when "garnyshes of pewder vessell"—that is, sets in dozens of dishes, platters, and saucers of pewter, far indeed removed from the Cellini-like chargers of Nuremberg and Augsburg—were the highly-esteemed though rude table appliances of persons of position, with the not very congruous drinking-cups, salts, and other requisites in gleaming silver.[2] At the end of the century silver cups were used in some of the Inns of Court as being cheaper than glass or pottery on account of the breakages.

[1] Many remarkable examples of rude village communion cups from the latter half of the sixteenth to the early part of the eighteenth century remain in the Diocese of Carlisle.—See *Old Church Plate in the Diocese of Carlisle*, edited by R. S. Ferguson, 1882.

[2] In a picture by Mabuse, in the Palais des Beaux Arts at Brussels, of Christ in the house of Simon the Pharisee, square pewter plates with gilt edges are set out on the table. The Son of God has at His left side a footed glass of tumbler form, like a modern masonic glass, with a cover. It contains red wine. In the *More Inventory* both round and square trenchers are mentioned.

The old order of things has now quite passed away; the Gothic is clean gone, and the glasses which are coming before us belong to the Renaissance. But before touching upon the first circumstances which led to the new birth of glass-making for vessels in England exactly in the middle of the sixteenth century, we may refer to an interesting series of choice Venice glasses belonging to a conspicuous though darkly-stained character in history. These are comprised in the inventory of the effects of Robert Dudley, Earl of Leicester,[1] so created in 1564, taken after his death in 1588. That these glasses were obtained before 1575, the year of the "Princely Pleasures"[2] at Kenilworth Castle, where everything was "apted in all points to the best,"[3] is more than probable. As to the twelve "beare glasses," it has been assumed that they were made to an order in the form of bears in allusion to the ancient badge of the Earl of Warwick, to which Dudley became entitled, by the restoration, in 1557, of his elder brother Ambrose under a new creation to the earldom of Warwick, enjoyed by his father John Dudley, who was further advanced in 1552 to the dignity of Duke of Northumberland, and beheaded in the following year. It is far more likely that these cups were not "verres à bête," but that "beare" is simply the free and usual spelling of a scribe for *beer*. This is a sad descent from chivalry to the commonplace, but a glass fashioned like a bear could hardly have had a cover, though a beer glass at that time usually had, the liquor being often unhopped and the cover to keep the flies out, as in Germany at the present day; nor would the "bears" have been spoken of, as the "beare" glasses are in the inventory, as "of several fashions."[4] More interesting than those suppositious glass animals are the dishes "gilte with the sinque foyle on the brims," and the forty "dishe glasses" of two sorts, perhaps of tazza form.

In 1570 Bertram Anderson, alderman of Newcastle-on-Tyne, had ten dozen drinking-glasses. This quantity recalls the entry in the archives of Lille of 1620, under which date Paul Verhaeghe was paid for "plusieurs parties de verres, tant

[1] Halliwell's *Ancient Inventories*. See Appendix, Inventories, No. V.

[2] Gascoyne, *Princely Pleasures*, reprinted in G. Adlard's *Amy Robsart*, p. 175.

[3] Laneham, Letter, etc., *ibid.*, p. 156.

[4] As to when hops were first used in England the subject is well discussed in Bickerdyke's *Curiosities of Ale and Beer*, chaps. i. and iv. It will be sufficient to state here that the fashion seems to have been introduced early in the sixteenth century, through the cultivation of hops in Kent by Flemish immigrants. Ale was the old English word, and the liquor, made only of malt and water, was drunk new. Beer was the same drink with the addition of hops after the foreign fashion, long considered an adulteration. Rude beer-pots made in the shape of a bear, of which the head is removable, like the hat of a Toby Fillpot jug, were made both in white and brown earthenware in the early part of the eighteenth century; it is said, at Nottingham.

d'Anvers que de Venyse qui par lui furent livrées ceste présente année pour banquets faits en la maison échevinale."[1] It is probable that Anderson's glasses were imported from the Low Countries, inasmuch as there is no evidence that glass-works were established at Newcastle-on-Tyne before 1615, the year of the prohibition of wood for glass furnaces by Royal Proclamation.

[1] See Introductory Notices, p. 38.

CHAPTER V.

RENAISSANCE OF GLASS-MAKING IN ENGLAND—STATE PAPERS AND DOCUMENTS—ARRIVAL OF VENETIANS IN LONDON—GLASS-MAKING IN SUSSEX AND SURREY—CORNELIUS DE LANNOY—MONOPOLY PATENTS—CONCESSIONS TO GLASS-MAKERS FROM THE LOW COUNTRIES, NORMANDY AND LORRAINE—PATENT TO VERZELINI—PAINTED GLASS IN KING'S COLLEGE CHAPEL—EXAMPLES OF ENGLISH-MADE GLASSES.

As to the circumstances which brought about the Renaissance of glass-making in England, they were of a nature precisely similar to those which had the same effect a decade earlier in the Low Countries, and which have been spoken of in another place. Documentary proofs of glass-making in the form of drinking-vessels in those regions during a long preceding period are certainly few and isolated; but the recorded evidences of the same industry during the like length of time in England are fewer still; and as no single example appears to remain of a Low-Country-made glass that may be referred to the thirteenth or even to the fourteenth century, so—with the exceptions of the thirteenth-century vessel from the coffin in the vineyard at Peterborough, the relic phials, Queen Elizabeth's cup at Windsor, that in the possession of Mr. C. H. Woodruff, Lord Burleigh's tankard, and the glass in the British Museum inscribed, IN : GOD : IS : AL : MI : TRVST, and dated 1586—no English-made glass drinking-cups or vessels appear to exist which can be dated between the end of Saxon times and the end of the sixteenth century. It is a melancholy antiquarian truth which has to be accepted.

Nevertheless, while the slight evidences for England have been evoked, and supported by the collateral testimony of the windows, to demonstrate that this particular artistic torch was always handed on, and never extinguished, it must be confessed that it is not until the arrival of the Venetians and Altarists in the Low Countries, and of the Venetians ten years later in England, that we finally, and almost suddenly, come into the light of day. In the place of solitary and widely-

scattered items we now have a chain of Documents in which the whole story of one of the most remarkable art movements that the world has witnessed is fully and clearly set forth; and not only told us by the documents, but, what is better still, completely illustrated by the graceful Venetian glass vessels themselves, the Low Country versions of them, and their delineations in the pictures.

Antiquaries both in Belgium and in Holland have availed themselves of their considerable documentary evidences with an industry and acumen that is beyond praise, and have ably set forth the results of their labours; in short, during the last twenty years the national archives have been unsealed, and a new volume of the art history of the Seventeen Provinces made available for students.[1]

Far less favoured than our Dutch and Belgian confrères, the documentary aids to the history of the establishment of glass-making in England, under artistic auspices, by the Venetians in the middle of the sixteenth century, is comprised within public records of a very small compass as compared with the detailed accounts of the settlement and movements of the Venetians and Altarists in the Low Countries; for the stay of the Italians in England was very short.[2] But these documents are followed by others, fuller and still more interesting, concerning the steps taken by certain Flemings and Frenchmen to set up glass-houses here, and the subsequent efforts made by Englishmen alone for the carrying on of the glass industry which eventually became so famous.

The whole of these State Papers and Documents will now be referred to in chronological order, from 1549 to 1660.

The establishment of Venetian glass-makers in England was on this wise. In 1549 eight glass-makers[3] quitted Murano, as many others did in those days, on account of the long cessation of work, namely, two months and a half in the year, during which time they had no means of livelihood. They appear to have been enticed to Antwerp by one Delame, and they soon departed from thence to London, attracted by the offers of Edward VI., for then, as later, as a document of 1623 states—"Tous les Rois et Princes désiraient et affectaient avoir en leur royaulme cette science."[4] It is probable that the Venetians were set up by the King in the hall of the Crutched Friars in the city of London. The author of *The Present State of England* affirms wrongly that it was in 1557 that glasses

[1] See Introductory Notices, p. 36.

[2] No glasses "façon de Venise" made by the first Italians in England can be referred to as such. It is probable that they were somewhat inferior to those produced at the same period in the Low Countries.

[3] Their names were: Josepo Casselari, Marco Terrible, Piero Terrible, Gracioxo, called Disperato, Battista da Chiari, Alvixe di Albertino, Heremia Pixano, Sebastian Zanon.—H. Schuermans, *ut sup.*, Lettre X., p. 558; Angleterre, *Bulletin des Commissions royales d'art et d'archéologie.*

[4] Houdoy, *ut sup.*, Document XI. of 7th January 1623.

first began to be made in England; he is right in saying that the finer sort were produced in Crutched Friars in 1575, as they were by Verzelini.

The Venetian Inquisition of State ordered, as long ago as in 1454, that, if any workman transported his craft into a foreign country to the injury of the State, an emissary should seek him out and kill him. In spite of these precautions several foreign states had procured glass-makers from Murano before the middle of the sixteenth century. At a meeting of the Council of the glass trade in Murano, on 7th September 1549, the citizens complained of being unemployed for two and a half months at a time, and the authorities were then petitioned to take steps for preventing the manufacture from being carried out of Murano. The result was that, on 18th September in the same year, it was enacted that all artificers who had left Murano to work, contrary to the order of the Council, should be summoned from the Edict Steps of St. Mark's at "Rialto," that is Venice, to return within a certain time; and that if they refused and should be captured, they should be sent to the galleys for four years. News of this measure reaching the ears of the Muranese glass-makers in London, they explained that poverty compelled them to seek employment abroad before the Act lately passed, and that on endeavouring to escape from the hands of the "signori alieni" in England, they were imprisoned in the Tower, fed on bread and water, and kept in custody and under penalty of the gibbet unless they worked out the money which they had received; this was to be accomplished in two and a half years' time.[1] A compromise was arrived at on 13th June 1550, by which eighteen months were allowed for the English engagements to be satisfied, and in order to gratify the King, who took much interest in the matter, the men promising then to return to Murano. Seven of them in due course did so, but the eighth, Josepo Casselari, less patriotic, remained in England and associated himself in London with Thomaso Cavato from Antwerp until 1569, when he made his way to Liège.[2]

The seven Venetians quitted England at the end of 1551, and their stay here of about two and a half years must have had good effect in improving the technical skill of the English glass-makers who would have worked with them, probably, as we have seen, in Crutched Friars. The fact that the finer sort of glasses were stated to have been made in Crutched Friars, in 1557, indicates the natural results of the teaching of the Venetians in their particular manipulation

[1] *State Papers*, Venetian, 1549-50. The menace of the gibbet must have been mere empty threat. These men had done nothing worthy of death or of bonds in England, still less of exposition in chains *in terrorem*. See *Hanging in Chains*, by Albert Hartshorne, edit. 1891.

[2] H. Schuermans, *ut sup.*, Lettre X., p. 568; *Mov et Neessen*, vol. i. p. 195; Sardo di Sardi, Florentin, déclare entre autres que Cavata avait été associé avec Josepo Casselari "che estava in London." —Act cited by M. Génard.

of glass. We have no evidence to produce in proof that there were any Venetians, except Casselari and Cavato, then working in England, but it is possible that there were others; nevertheless, from the circumstance of no foreigners being alluded to in connection with the mention of the manufacture of glass of the finer sort in 1557, we are free to infer that such were then made by English workmen alone, six years after the departure of the first Italians. Writing under the last-named year, Thomas Charnock, in his *Breviary of Philosophy*, says:—

> As for glassemakers, they be scant in this land,
> Yet one there is as I doe understand:
> And in Sussex is now his habitacion,
> At Chiddingsfold he workes of his Occupacion:
> To go to him it is necessary and meete,
> Or send a servant that is discreete:
> And desire him in most humble wise
> To blow thee a glasse after thy devise.[1]

This man can only have produced, as his predecessors did, the commonest green glass, made from coarse local sand and impure alkali obtained from wood ashes. Chiddingfold is not in Sussex, but on the borders of Surrey, on the Weald Clay, and in a district which must, in the middle of the sixteenth century, have been a dense forest, ranged in earlier times by the gray wolf of the Weald. It immediately adjoins the tract of country geologically known as "Hastings Sand," and was well placed for common glass-making. This industry was far older in those parts than the iron workings, and largely added to the consumption of wood. Camden says, referring to Sussex: "Neither want here glasse-houses, but the glasse there made, by reason of the matter and making, I wot not whether, is likewise nothing so pure and cleare and therefore used of the common sort only."[2] Another notice of the glass manufacture in the same favoured county records: "Neither can we match the purity of the Venice glasses, and yet many green ones are blown in Sussex profitable to the makers and convenient to the users thereof;"[3] and writing in 1662, Fuller, speaking of Sussex, says that "coarse glass-making was in this county of great antiquity."[4]

To return for a moment to the Venetians. Stow, in his *Chronicle*, says that

[1] Printed in Ashmole's *Theatrum Chemicum*, 1651. As with many points in Churchyard's *Worthines of Wales*, of 1587, Charnock's doggerel does not tell us quite enough; but it is certain that the glass-maker in question was an Englishman and not an "outlandish man." There is no evidence that any Italians were working here between 1551 when the seven Venetians departed, and 1575 when Vercellini arrived, save Casselari and Cavato, up to 1569, and the Frenchmen did not come until 1567. The latter came naturally to Sussex as known from time immemorial as an English glass-making centre.

[2] *Britannia*, Philemon Holland's translation, p. 306.

[3] W. H. Blaauw, *Sussex Arch. Coll.*, vol. i. p. 11.

[4] *Worthies of England*, vol. iii. p. 242.

"the first making of Venice glasses in England began at the Crotchet Friars, in London, about the beginning of the reign of Queen Elizabeth, by one Jacob Vessaline, an Italian." "The Father of English Antiquities," although writing so near the time he spoke of, has confused two circumstances—the first coming of the Italians in 1549, and the arrival of another Italian, Verzelini, in or immediately before 1575, who obtained in this year a special license to make drinking-glasses for twenty-one years. We shall come to him presently.

In the meantime Cornelius de Lannoy appears, apparently from the Low Countries.[1] He came towards the end of 1564, subsidised by the Government, to introduce improvements and give certain instructions, both in the glass-pot making and in the glass-makers' art as practised in the Netherlands. He worked in Somerset House, but he was not satisfied with the materials—the "provisyons"—which were supplied to him; so he sent for others from Hesse and Antwerp; nor did the skill and receptive nature of the English workmen impress him. Although De Lannoy was somewhat of an impostor, it is not unlikely that he wished to introduce glasses of an ornamental kind, "verres façon de Venise" of a high quality, perhaps in themselves not beyond the powers of the English glass-blowers at that time, but of a character for which the materials conveniently to be gotten in England were not quite suitable. Does this marked difference in the English "provisyons" which so baffled De Lannoy point to some of the early local sources or constituents of "flint glass"? It is, indeed, stated in a letter, dated from Belsize, from Armigill Waade, the clerk of the Council, to Cecil,[2] which contains all the information we have concerning De Lannoy and his enterprise, that "All our glasse makers can not facyon him one glasse tho' he stoode by them to teach them." Evidently the ill-tempered clay for the melting-pots failing at the high temperature demanded by De Lannoy—a characteristic indicating the advanced crystalline quality of glass he was attempting to make—was the chief source of trouble, for "the potters cannot make him one pot to content him." We hear no more of this venture, which was to continue for three years; the solitary record is of particular value as marking the continued desire of the English Government to have thus early in the period of its Renaissance, in its perfection, and made at

[1] He was a professed alchemist, one of a class of men who, while pretending by fraudulent experiments to seek for such unattainable objects as the Philosopher's Stone, and by its aid the transmutation of the base into the noble metals, indirectly caused the study of chemistry, and many discoveries of advantage in the science of metallurgy and medicine. Glauber, died 1668, was an alchemist, but his important discoveries give him a high position among early chemists.

[2] Appendix, Original Documents, No. I.

home, the science "que tous les Rois et Princes désiraient et affectaient avoir en leur royaulme." There was no question, as some have thought, of De Lannoy introducing a knowledge of the art-stoneware of the Low Countries and Germany, such as is now ranged under the indefinite name of "Grès de Flandre."[1] With Waade's letter is enclosed an account indicating that £150 had been paid to De Lannoy for "provisyons," and £30 on his coming to England, and a note that he was to receive £30 a quarter; the first quarter fell due on 25th March 1565, showing that he had not been long at work.

We have now entered the period of the Monopoly system. This industrial policy of Elizabeth was "originally promoted with the object of reviving or introducing certain mining and metallurgical industries," and was destined, as we shall see, "to exert an important influence on the development of the glass industry."[2] It appears that the history of the Elizabethan Monopoly Patents still remains to be written, the accepted version of these grants being based upon a misconception of the Monopoly debate of 1601, and consequently opposed to

[1] It appears from Dugdale's *Origines Juridicales*, 1680, p. 148, that the Register of the Inner Temple, fol. 127, A, contains the following entry:—"Untill the second year of Q. Eliz. reign, this Society did use to drink in cups of Ashen Wood (such as are still used in the King's Court), but then those were laid aside, and green earthen pots used which have ever since continued." It is shown by the books of the Drapers' Company (Herbert, vol. i. p. 442) that the ashen cups for red wine and hippocras at an election feast in 1522 were gilded. In a letter from Sir J. Cæsar to Sir W. More, written from the Inner Temple, 19th August 1591, printed in Kempe's *Loseley Manuscripts*, p. 311, it is stated that the white clay for making the green earthenware pots, no doubt green glazed, was specially obtained from the Bishop of Winchester's park at Farnham, but that owing to the vacancy in the bishoprick the clay could not be obtained without the authority of certain persons in the neighbourhood, of whom More of Loseley was one. Cæsar, as a member of the Inner Temple, requests for this leave in order that the green pots may be made and the house furnished as aforetime. Thus we fashioned our own drinking-vessels of earthenware quite well without the help of the foreigners.

Paul Hentzner states that a person of distinction, once being surprised at the great number of silver drinking-cups in the Inns of Court, said, "he should have thought it more suitable to the life of students, if they had used rather glass, or earthenware than silver." To which he was answered that the college would gladly give him all their plate if he would undertake to supply them with all the glass and earthenware they would have a demand for, since it was very likely, owing to the constant breakages, that he would find the expense exceed the value of the silver.—Hentzner's *Travels in the year* 1598, *England*, p. 44, edit. H. Walpole, 1757.

In the course of the erection of the new part of Paper Buildings in 1849, a quantity of broken green pots were dug up. About 1823 two earthenware green jugs were found in making the foundations for Raymond's Buildings, and a similar example on the site of the new hall of Lincoln's Inn. These vessels were not only for the use of the legal societies, but were common drinking-cups of the period to which they belonged. It is almost certain that they continued in use in the Inns of Court until the time of Charles II., when they would have been gradually supplanted by glasses, either home-made, or fashioned in Venice from English designs, and imported by members of the Glass-sellers' Company. Pepys, 29th October 1663, complains of having nothing better than earthen pitchers to drink out of at the Lord Mayor's Feast at the Guildhall.

[2] *The Antiquary*, November 1894, p. 210, "English Glass-making in the Sixteenth and Seventeenth Centuries," by E. W. Hulme. See "A Sketch of the Early History of the English Patent System, List of the Grants, etc., 1561-1570," by the same, *Law Quarterly Review*, April 1896.

the contemporary evidence of the State Papers and Patent Rolls. That the first Monopoly Patents were fruitful of good is sufficiently shown by the establishment of the copper industry at Keswick, that of alum and copperas in the Isle of Wight, and that of brass and iron wire at Tintern, besides the introduction through these agencies of improved machinery and processes in all kinds of industries, within the short time of the granting, in 1561, of the first Monopoly Patent of soap, and 1567.[1]

Obviously the glass industry was not destined to remain long passive and unaffected by this movement, and in August 1567 Pierre Briet and Jean Carré, from the Low Countries, being recommended by the Vidame of the Bishop of Chartres,[2] wrote to Cecil from Windsor, asking for a License for twenty-one years to set up a glass-house in London, similar to those in Venice, for the manufacture of crystal glass for drinking-vessels. They hope within a few months to adorn London with an art as famous as that of Venice or Antwerp, and state that all the necessary materials for the undertaking exist in the country, except soda, which they expect to find; the fuel would be procured from Arundel.[3] This seems a long way to go for wood, but Sussex was then familiar ground to glass-makers, and the petition was accompanied by a request from a body of French workmen from Normandy, evidently then halting in the Weald, for a monopoly of the window-glass manufacture.

Upon this, in order not to do injustice to native subjects, communications were instituted with one of the Chiddingfold glass-masters, who declared that he neither had made nor could make window-glass. Of course not, working "of his Occupacion;" and he said that he only produced small things, such as orinaux —apparently water globes, like those of the Low Countries,[4] for improving the power of the rushlights—mortars, bottles, and similar articles. He was evidently no further advanced, perhaps rather less so, than the Low Country glass-makers were in this respect before the coming of the Venetians and Altarists, and doubtless his drinking-vessels generally resembled those that are shown in the early Flemish pictures.[5] English window-glass—the "brodeglas" of 1380—was made in London then, as it certainly was in the time of Henry VII., as we shall see.

[1] *The Antiquary*, ut sup., p. 210.

[2] A vidame of a bishop was the officer who managed his temporalities and commanded his troops. The Vidame of Chartres appears to have come with M. de Beauvais on an embassy from the French king to the court of Elizabeth in 1589, when he received a present of 657 ounces of gilt plate.—*Archaeologia*, vol. xlviii. p. 201, "Account of Papers relating to the Royal Jewel House."

[3] *State Papers*, Domestic, 1567.

[4] *Ibid.* See Introductory Notices, p. 60.

[5] Precisely the same shapes are shown in the rude woodcuts heading the ale-house ballads of this period.—See J. Bickerdyke, *Curiosities of Ale and Beer*, pp. 189, 306, 326.

We were just as much behind Low Country glass-makers as regards art drinking-vessels as is marked by the difference between the time of the

Hereupon the Frenchmen demanded a privilege of thirty years, in order that furnaces might be erected at their discretion in convenient places, namely, twelve in England and six in Ireland, near the woods for fuel, the sea for sand or sea-weed, or the rivers for pebbles. It is further particularly stated in the request that such other materials used for the manufacture of glass as fougière—bracken or fern, ronces—briars, and cailloux—flints, are of little value. From the assumed capability of a furnace each would pay a yearly rent of £40 or £50 to the Crown. The application was supported by Carré, and a small royalty was offered to Cecil, but declined by him, much to their surprise.[1]

On 9th August Carré writes that he is informed of the Queen's being favourable to the project, and he follows this up by another letter, saying that he has himself erected two glass-houses, one at "Fernefol," Sussex, for Normandy and Lorraine glass, by Her Majesty's License, and one in London, by the leave of the Lord Mayor, for crystal glass, no doubt employing in each place both French and Lorraine workmen. He states that he has brought over workmen at his own great cost, and to the benefit of the kingdom, and is sending for soda from Spain. Yet he hears that another is likely to have the privilege of making glass, which would ruin him, and prevent him from paying what he owes to the Queen; he requires the Patent for twenty-one years.[2]

Carré's fears as to another having the privilege of making glass were soon to be realised. The person he had heard about was Anthony Becku *alias* Dolin, also from the Low Countries, and on 12th August he found it wisest to enter into an agreement with him and the Queen. This formed the basis for the Patent for window-glass which was granted for twenty-one years on 8th September 1567.[3] In it Carré and Becku undertake to exercise and practise "the arte feate, or mysterie of makinge of glas for glasinge such as is made in ffraunce, Lorrayne, and Burgondy," all other manufacture of the said kind of glass being specially prohibited save with the assent of the grantees, they agreeing to supply the needs of the realm in this respect, and to sell the glass "as cheape or better cheape" than the like glass made abroad—for which there had always been a certain demand in England—has hitherto been sold. "And also to teatche Englishe men oure subjectes the same scyence or arte of glas makinge parfectlie and effectuallie so as the same scyence or arte after the ende of xxj yeares maye be perfectually and

first arrival of the Italians in the Low Countries—namely, the establishment of Cornachini in Antwerp in 1541, and the coming of the eight Venetians to London in 1549. But neither the influence of the latter, nor that of De Lannoy, if he possessed any, had penetrated into the Weald twenty years later.

[1] *State Papers*, ut sup.

[2] *Ibid.*

[3] Appendix, Original Documents, No. II.

substancyally vsed and practysed by Englishe men," who shall be bound to them according to the use of the city of London, under pain of forfeiture of the grant.

Neither of these men had any practical knowledge of the art, being only speculating Low Country merchants, and they were compelled to lease out the benefit of their Patent to the Frenchmen. The substitution of Becku's name for that of Briet led to difficulties between the new partners. In a letter to Cecil[1] Becku sets forth that Carré in procuring glass-makers from Lorraine—Thomas and Balthazar de Hennezel, and others, doubtless De Thiétrys, Du Thisacs, and Du Houxes among them, and of whom we shall hear more later on—agreed with half of their number in his own name and with half in that of Jean Chevallier,[2] therefore putting the men outside the power of Becku, who could do nothing with them. In an evil hour the latter desired Briet's assistance, who, instead of helping him, "did contracte with the said workemen to sett vp on the other side of the see by Bullen a certeine forneys, saing it was night vnto England, and should be as commodious there as in the Realme and so do their feate without privilege, and besides should kepe the science out of the Realme, for they wolde in no wise have the science to come into England." They were willing indeed to sell their glass in England, but they did not wish to show the Englishmen their particular Lorraine methods. It is quite certain that the gentlemen glass-makers from Lorraine did not again cross the water.

Thus deceived and deprived of help, Becku, who appears to have been an honest, conscientious man, obtained the assistance of an Englishman, Ferdinand Poyntz, a citizen of London, and probably, from his name, a native of Sussex. With his help, he tells Cecil, he trusts to satisfy his agreement with the Queen.

On 6th September 1567, two days before the issue of the Patent to Carré and Becku, they petitioned for leave to cut wood and make charcoal in Windsor Great Park, and to convey it from thence;[3] this was probably for use in Carré's crystal glass-house in London.

Now Pierre Briet suborned the Normandy workmen, re-joined himself with Carré, and obtained from him, by a straining of the terms of the Patent, a grant of privilege; Becku's relations at the works were ill-used, and he had to send to Germany for fresh workmen. It is difficult to get at the truth of the matter owing to the paucity of documents; the case was eventually referred to Richard Onslow and William More, August 1569, who examined Becku, Carré, and Briet, as well as John Bonghan, *i.e.* Bongar, ancestor apparently of Isaac Bongar who annoyed

[1] Appendix, Original Documents, No. III. [2] *Ibid.*, No. IV. [3] *State Papers*, ut sup.

Mansel at Newcastle in the early part of the next century, and three other persons described as Sussex glass-makers.[1] It is easily conceivable that the incursion of so many foreigners into a Sussex glass-making district was viewed with distrust by the native workers, and in 1574 Burghley was informed by the Bishop of Chichester of the frustration by the authorities of a plot of certain vicious persons about Petworth to rob and murder the French glass-makers, and burn their houses.[2] Petworth was close to a centre of glass-making in Sussex both by native and foreign workmen, the district including Fernfold Wood in Loxwood, (the "Fernefol" of Carré), Kirdford, Wisborough Green, Chiddingfold, Ewhurst, and Alfold.

On 15th December 1575, Giacomo Verzelini, a fugitive Venetian, obtained a Patent for twenty-one years[3] "for the makynge of drynkynge glasses suche as be accustomablie made in the towne of Morano and hathe undertaken to teache and bringe vppe in the said Arte and knowledge of makinge the said drynkynge Glasses owre natural Subjectes." The glasses are to be made "as good cheape or rather better cheape than the drynkynge Glasses comonlye broughte from the cittie of Morano or other partes of beyond the Seas." Verzelini had already set up a furnace in the Crutched Friars, in Hart Street, Aldgate, three months before the issue of his Patent, or was more likely using the old furnace provided there for the eight Venetians in 1549, because Stow gives the following account: "The Friars Hall was made a glasse-house, or house wherein was made glass of divers sorts to drink in; which house in the yeare 1575 on the 4 Septemb. burst out into a terrible fire, where being practised all means possible to quench it, notwithstanding, as the same house in a small time before had consumed a great quantity of wood by making of glasses, now itselfe, having within it about 40,000 billets of wood, was also consumed to the stone wals, which nevertheless greatly hindered the fire from spreading any further."[4] Later on complaints were made against Verzelini's Patent, the ruin it brought to fifty households selling glasses only, and the injury it caused to merchants bringing glasses from beyond the seas, besides the consumption of 400,000 billets of wood every year.[5]

In 1576 Pierre Briet and Pierre Appell, the assignees of Carré's share in the Patent, sought for the confirmation and renewal of the License for twenty-one

[1] Molyneux MSS., *Hist. MSS. Com.*, Rep. VII., p. 621; quoted by E. W. Hulme, *The Antiquary*, November 1894, p. 214. Mr. Garraway Rice found the following entry in the Wisborough registers:—"1572 May 23. Joh Carry M^r of ye glashouse was bur: at Awfolde."

[2] *State Papers*, Domestic, 1574.

[3] Appendix, Original Documents, No. V.

[4] *Chronicles*, p. 157, edit. 1633.

[5] Lansdowne MSS. 48, Art. 78.

25.—JACOB VERZELINI.

years, on certain new terms of payment to the Crown, and of arrears of royalty due from the Frenchmen, in consideration of the prohibition of foreign glass from France and Germany, then, as it was asserted, largely imported. The application appears to have been rejected.[1]

In 1581 Godefroid Verhaegen left England to establish glass-works "a la venetienne" at Middelburg in Zelande.[2] He may have been an employé of Carré, and had no doubt learnt something useful from the English. In June 1584 Nicholas Moore presented a suit to the Queen for a License to make glass within her realm.[3]

It appears that Verzelini, like De Lannoy in 1565, liked "marvelously well the syte of Guldeford" for glass-making, and that he had established, before 1586, a furnace immediately north of the Surrey and Sussex glass-making district, which included respectively Chiddingfold, Alfold, and Ewhurst, and Loxwood, Kirdford, and Wisborough Green. We gather from the Loseley MSS. that complaints were made to the Council in 1586 by the inhabitants of Guildford, Godalming, and Wonersh, concerning a glass-house erected by an Italian in those parts to the wasting of the woods—an early local objection to this point—and to the prejudice of the whole country. The Council directed Sir Thomas More and others to take bond of the Italian for his appearance, and to stay the working of the glass-house.[4] No Italian besides Verzelini was at this time master of a glass-house in England (Plate 25).

The fire at the Crutched Friars was a discouraging beginning, but Verzelini was certainly still working under his Patent in 1589, because in that year Hugh Miller and Acton Scott, footmen of the Queen, prayed for a Lease for a term of years, or otherwise, for "making of all mann^{r} of glasses whatsoe^{r} wh^{ch} are vsually made w^{t}hin yor Hygnes Realme of England," namely, "urynals, bottles, bowles, cuppes to drink in and such like except those that is already granted to one Jacob a stranger dwelling in the Crutched Friars by his patente for terme of years, for the makinge of all mann^{r} of counterfayt Venyse drinkinge glasses, and except all mann^{r} of glasses for glazing windows." The petitioners conclude by saying—"the making of all which sayd glasses straungers which are none of your majesties subjects do take the commodytie therof from your

[1] *The Antiquary*, December 1894, p. 259, Lansdowne MSS. 22, Arts. 6, 7, 8, cited by E. W. Hulme.

[2] See Introductory Notices, p. 38.

[3] *State Papers*, 5th June 1584.

[4] A. J. Kempe, Loseley MSS., p. 493, *Addenda*, No. 22. At the feast after the funeral of Mary Queen of Scots, 1st August 1587, in the hall of the Episcopal palace at Peterborough, four dozen glasses were provided at 4s. These may have been the work of "the Italian."

highnes subiects who are as well able to exercise that trade and with as moch scyll as any others are."[1] This is an important statement, as bearing upon the capability of native makers of glass and glass vessels in 1589.[2]

On 3rd October 1589 George Longe addressed a petition to Burghley,[3] repeating the statement in Carré and Becku's Patent as to the teaching of Englishmen, and pointing out that the business having failed owing to the divisions between the foreigners, glass-making was carried on by "divers" without license, to the great waste of timber and woods, to which notable point attention is now, for the second time, seriously called, and to the loss of custom to the Crown. He also proposes to reduce the fifteen glass-houses in England to four only, and to erect the rest in Ireland where wood was superfluous, and where every glass-house would be as good as a garrison of twenty men. He undertakes to employ all glass-makers thrown out of work in England by the measure he suggests, and says that he has spent his time wholly in the trade, and has brought to perfection, during two years of trial, the making of glass in Ireland, having found there the proper materials.

Longe states further that he has bought the Patent for Ireland from Captain Wodehouse, who, it appears from the Irish State Papers, together with one Ralph Pylling, had assisted Longe in setting up two glass-furnaces in that country. This point will be reverted to. Longe's great difficulty was to persuade glass-makers to remain in Ireland when they could obtain work in England. The unsettled state of Ireland, in spite of the exertions of Sir William Fitzwilliam, was, no doubt, the drawback.[4]

[1] Lansdowne MSS. 59; Plut. lxxiv. E.

[2] Though this is the last we hear of Verzelini at work, it appears that he did not leave the country as his compatriots of 1551 had done. He liked the "signori alieni" so well, and being himself a fugitive, that he settled in England, was naturalised 26th November 1576, and dying in 1606 was buried at Downe, Kent, where, in the chancel of the church, monumental brasses half life-size represent him in civil dress, together with his wife. Below them is the following inscription:—

HERE LYETH BVRIED IACOB VERZELINI ESQVIRE BORNE IN THE CITTIE OF VENICE, AND ELIZABETH HIS WIFE BORNE IN ANDWERPE OF THE AVNCIENT HOVSES OF VANBVREN AND MACE, WHO HAVINGE LIVED TOGETHER IN HOLYE STATE OF MATRIMONIE FORTHE NYNE YEARES AND FOWER MONETHS DEPARTED THIS MORTALL LYFE THE SAID IACOB THE TWENTYE DAY OF IANVARYE AN° DÑI 1606 AGED LXXXIIIJ YEARES AND THE SAYD ELIZABETH THE XXVI DAYE OF OCTOBER AN° DÑI 1607 AGED LXXIIJ YEARES AND REST IN HOPE OF RESVRREXION TO LYFE ETERNALL.

Over Verzelini's head is his shield of arms, and over the wife the arms of Vanburen and Mace quarterly. Below the inscription are two brass plates containing respectively figures of six sons and three daughters; and beneath them again a shield of arms—Verzelini impaling Vanburen and Mace quarterly.

The Rev. A. W. C. Hallen, *Scottish Antiquary*, April 1893, p. 148, notices that his son and heir Francis was plaintiff in a Chancery suit in 1621, the defendants being his brother Jacob and others. It is seldom that so much is known about an artist in England so far removed from our own time.

[3] Appendix, Original Documents, No. VI.

[4] Sir William Fitzwilliam was for nearly thirty years Commander-in-chief in Ireland, and vigilantly

The result of the petition seems to have been favourable, in so far that Burghley suggested that Longe should have an interview with Dolin on the subject. Shortly afterwards Longe wrote a letter to Burghley,[1] pleading for the Patent, and repeating and strengthening some of the points in his petition. He also says that the superfluous woods in Ireland are the Queen's greatest enemies there in time of rebellion. But the matter appears to have been dropped, and we hear no more of this interesting episode. There is reason to believe that Longe was of Sussex extraction, probably from the neighbourhood of Chiddingfold.

On February 16th 158$\frac{4}{5}$ an Act[2] was drawn up "against the making of glass by strangers and outlandish men within the Realm, and for the preservation of timber and woods spoiled by glass-houses." This was the first time that attention was authoritatively directed to the question. No alien was to carry on the trade of glass-making unless he employed and instructed one Englishman for every two foreigners, and only cut timber within certain specified areas. The Bill is said to have passed through all the stages but not to have received the Royal assent. Longe in his petition of 3rd October 1589 implies, however, that it was suppressed and shelved, "and so it rested undetermined."[3]

It will have been observed that in the Patent granted in 1567 to Carré and Becku it is stated that they are to teach Englishmen in the science or art of glass-making for glazing, as it is produced in France, Lorraine, and Burgundy; and that in the Patent to Verzelini in 1575 it is provided that he is to teach the Queen's subjects the art and knowledge of making Venetian drinking-glasses. These conditions have been constantly and loosely repeated, and held to signify in the former case that Englishmen at that time could not make window-glass, and in the latter that they could not fashion glass drinking-vessels. Clearly it was to the interest of the foreigners who sought employment in the glass manufacture in England, when times were troublous abroad, to pretend that we had everything to learn, and that it was necessary for the advantage of the country that the Patents should be issued to them in order that they should instruct us; but, when the time came, they declined to do so.

Now, how stand the facts as to English window-glass in the sixteenth

prevented the landing of the Armada in 1588. He died in 1599, and is buried in the beautiful chancel of Marholm Church, Northamptonshire, where a tomb remains with effigies of himself and his wife.

[1] Appendix, Original Documents, No. VII.

[2] *Hist. MSS. Comm.*, Report III., p. 8.

[3] See Appendix, Original Documents, No. VI.

century? To take one example only—the series of painted windows of King's College Chapel.[1] These were set up between 1515 and 1531, and it is absolutely certain from documentary evidence that they are chiefly English works, both as regards the glass and the painting. The designs for the vidimuses or cartoons for the subjects are gathered from German, Flemish, and Italian sources. Some of them were devised by Barnard Flowre, a German, who was naturalised here, 6th May 1514, and by Galien Hone, "from parts of Holland under the obedience of the Emperor," and who took out Letters of Denization, 5th March 1535.[2] Others are the work of English artists, Richard Bounde, Thomas Reve, and James Nicholson. The glass was probably made and painted in Southwark, where window-glass was then made both by aliens and natives. The designs of the windows of King's are better than their execution in the glass, and are, of course, vastly superior in both those qualities to the painted windows by Dirk and Wouter Crabeth, Adrian de Vrye, and Dirk van Zyl, set up in the great church at Gouda between 1560 and 1597, striking as that display is. At King's Chapel "Normandy" glass was, indeed, at first contemplated, but the documents show that English glass was finally decided upon, no doubt because it was, as was specially wished, the best that could be obtained for a building in which everything was to be of the very best.[3] After the centuries of practice in window-glass making in England it would have been remarkable if English glass had not been chosen. Other examples might readily be adduced, and thoughts arise of the brilliant sacrifices to Dowsing's ravages in East Anglia, but it will have been sufficient to have alluded to the Chapel of King's. Could the English window-glass have so deteriorated between 1531 and 1567—in one short lifetime—that we had at the latter date to begin the whole thing afresh, and, with an unbroken national record in window-glass making, as has been already shown, from the twelfth to the sixteenth century—or, indeed, for that matter, up to the present day, to start anew in 1567?

Vasari, no slight authority, ranked the English painted glass of the sixteenth century as among the best then produced, and such was not the kind of art that should perish away in thirty years, leaving no trace, or the sort of manufacture that should die out and necessitate new instructors after four centuries of practice.

[1] See p. 130 (footnote).

[2] "Letters of Denization," 1509-1563, *Publications of the Huguenot Society*, vol. viii. pp. 93, 125, Preface, p. xlv., edit. W. Page.

[3] See Walpole, *Anecdotes of Painting in England*, vol. i. p. 170, edit. 1782; *Archæological Journal*, vol. xii. p. 153, "King's College Chapel Windows," paper by the Rev. W. J. Bolton; and p. 356, "Artistic Notes on the Windows of King's College Chapel," paper by G. Scharf.

The time was surely badly chosen as to which to assert, or even to suggest such an extraordinary disappearing when the much-windowed Perpendicular, of which the tracery had been so greatly influenced by the English painted glass, was passing away in churches, but assuming a new direction in houses; when the Renaissance with its magnificent glass pictures was taking its place in England, and the influences of Torregiano, of Holbein, and of the mysterious "John of Padua" were permeating through the land. The proposition of the foreigners, the arbitrary statements of irresponsible annalists, of unscrupulous detractors of Sir Robert Mansel, to be referred to later, and of eager claimants for Patents, were therefore quite untenable.

But let us be just to these continental glass-makers in England. Their knowledge of the capabilities of their English compeers was chiefly derived from what they saw in the Weald of Surrey and Sussex, and they framed their petition in 1567 accordingly. What they could teach the English was no more than just so much of the continental practice of glass-making, whether for glazing or for vessels, as might be novel to them. We know what the untutored Sussex glass-men could make in 1557, but we are not told what was then done by practised artists in London, where the windows for King's Chapel were produced thirty years before. In short, to teach Englishmen in 1567 the rudiments of an art which they had known and practised from time immemorial, must have been quite out of the question. And as to drinking-glasses the foreigners themselves had only been latterly and still were improving their hands in that art, through the teaching of the Venetians and Altarists, just as the Englishmen were doing. All stood then upon nearly the same footing in this respect, unless, haply, there might have been some teaching to the foreigners on the part of the English in regard to window-glass. Moreover, in Long's letter to Burghley of 1589, it is stated that the Frenchmen "by no means would teach Englishmen,"[1] but we hear of no complaints of this lack of instruction. Dugdale,[2] writing a century later, fell into the error on this point, saying that Carré and Becku obtained a Patent for making glass in England on condition of teaching the art to Englishmen, as if it were a novelty to them, the fact being that the Patent distinctly states that they are to teach the art of making glass for glazing, "such as is made in ffraunce, Lorrayne, and Burgondy," which was quite another matter.

With regard to Verzelini's teaching his case is very different. We have seen that the Chiddingfold glass-makers could only, on their own showing in 1567, produce small glass vessels, no doubt of the same kind as appear in the

[1] See Appendix, Original Documents, No. VII.

[2] *Warwickshire*, p. 355.

early Flemish pictures, and are alluded to by Harrison in his description of England. There seemed in 1575 to be a real want in England of drinking-glasses of a better kind, such as the eight Venetians had partially introduced during their short stay under Edward VI., from 1549 to 1551, and Verzelini came avowedly to teach "the arte and knowledge of makynge of drinkynge glasses suche as be comonly made and wroughte in the towne of Morano nere vnto the Citie of Vennys," which "hathe not bene knowen vsed or contynued by anye oure Subjectes or any others inhabiting within oure Realme of England."[1] This was not quite true, but the Patent was granted for the educational purpose only, and it is intimated therein that the large sums of money heretofore expended abroad "for that manner of ware" may now for the good of the commonweal be utilised at home.

In consequence of her long reign and popularity many personal relics have been attributed to Queen Elizabeth which will not always bear close scrutiny. Such attributions are easily made under misapprehensions, and by lapse of time acquire a kind of stability. For example, a circular white glass dish, $13\frac{3}{4}$ inches in diameter, preserved in the Dr. Williams Library in Gordon Square, London, is reputed to have held the water for the baptism of the Princess Elizabeth in 1533. We know from Hall and other chroniclers that a silver font was used for the ceremony—special precautions being taken lest the exalted child should catch cold from the immersion. That the dish in question—which is more likely to be Venetian than English, and was probably taken from among Henry VIII.'s large collection of Venetian glass—was used as a *taufbecken* for the unconsecrated water in which the sponsors should wash their hands before leaving the church, lest some of the holy oil should adhere to them, may not be improbable. Beautiful examples of such large platters, decorated in relief, were produced in pewter in Augsburg in the sixteenth century, and specially in Nuremberg by Kaspar Enderlein, working in the manner of François Briot. Crude modern brass versions of this class of platter are unfortunately common enough.

A chalice-shaped cup, $4\frac{7}{8}$ inches high, and $5\frac{1}{2}$ inches in diameter, of dark purple glass, is in the possession of Mr. C. H. Woodruff (Fig. 155).[2] This vessel, on a short silver foot of perhaps later date, has a well-authenticated pedigree, taking its history back to Bishop Ridley, chaplain to the Princess Elizabeth, who is believed to have received the Holy Communion from it, and is said to have given the cup to the martyr prelate. The well-known rarity of the use of

[1] See Appendix, Original Documents, No. V.

[2] *Proceedings, Society of Antiquaries*, 2 S., vol. v. p. 442.

glass chalices, and other reasons, make it difficult to believe that the cup served for this purpose at so late a date; but it has particular interest if it may be considered as English work, which seems probable, and supports the view that a few glass-drinking vessels of a higher quality than those produced in the Weald continued to be made in England up to the arrival of Edward VI.'s Venetians.

By the will of John Whitfield, who died in 1691, he bequeathed Queen Elizabeth's glass, which was his grandfather's.[1] The date of this record carries conviction as to the authenticity of the glass, but it no longer exists.

There is good reason for believing that a tazza-shaped glass, 5½ inches high, said to have been used by Queen Elizabeth, and now in the royal collection at

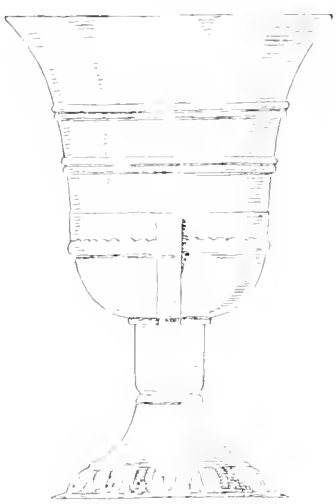


FIG. 155. (One third.)

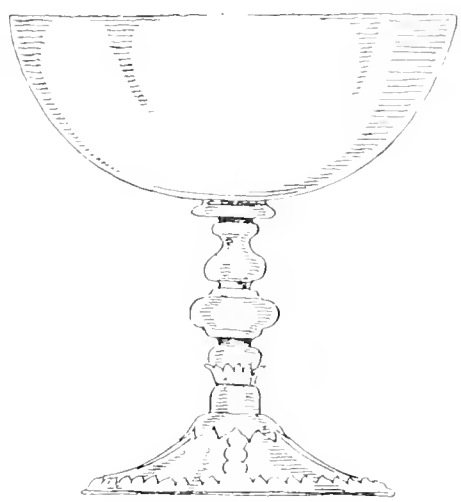


FIG. 156. (One half.)

Windsor Castle, is of English origin. If so, it may be from the hand of Verzelini. It was formerly in the possession of the Vickers family, and the arrangement of the shaped and stamped leather case shows that it originally had a cover, now gone (Fig. 156).[2]

In the possession of Sir A. W. Franks is a cylindrical glass tankard of the slightest possible brown tint, and full of minute striations. It is 8¾ inches high, with its beautifully chased silver-gilt mountings and handle, with no hall marks. On the top of the lid, in opaque and translucent enamels, is the following coat:— 1. Barry of ten Arg. and Az. on six escutcheons, 3, 2, and 1, Sa. as many lions rampant of the first, Cecil. 2. Party per pale Gu. and Az. a lion rampant Or. (? Arg.) supporting a tree eradicated, ppr. Winston. 3. Gu. (? Sa.) a plate between three towers triple-towered Arg. Cayerleon. 4. Arg. on a bend cottised Gu. three

[1] *Archæological Journal*, vol. xxii. p. 167.

[2] The glass was exhibited by Mr. W. Money, in whose possession it then was, to the Society of Antiquaries, 21st June 1883.—See *Pro. Soc. Ant.*, 2 S., vol. ix. p. 357. It was included in the Tudor Exhibition, 1890, *Catalogue*, p. 200, and is illustrated, together with the case, in the *Art Journal* 1890, p. 28.

mullets Or. Heckington. 5. Arg. a chevron Erm. between three chess rooks Sa. Walcote. 6. as 1. On the front of the thumb-piece is the crest in enamel on a wreath of the colours,—a garb Or. supported by two lions rampant, the dexter Arg. the sinister Az. These are the bearings of William Cecil, Lord Burghley. The presumed date of the mountings indicate that the glass is of the time of Verzelini's Patent, and that it was probably made by him (Plate 26).

That Verzelini's teaching was efficacious and sound, and that improvement was rapidly made, is shown by the fact that Hakluyt, in 1580, included in the list of things he proposed to take, no doubt for trading purposes, in the expedition for the discovery of "Far Cathay," that is, China, besides Venice glasses, "glasses of English making,"[1] just as William Wey, a hundred years before, recommended the pilgrim quitting Venice to provide himself with "cuppys of glass," and other glass vessels.[2] Again, we have the evidence of Harrison, in 1586, showing that the desire for drinking-glasses, both Venetian and home-made, had already grown up, to the disuse or "lothing" of silver cups, and not only among the upper and middle classes, but with the poorest also, who contented themselves with those made from "ferne and burned stone," exactly such as were produced by the native glass-makers in the Weald.[3]

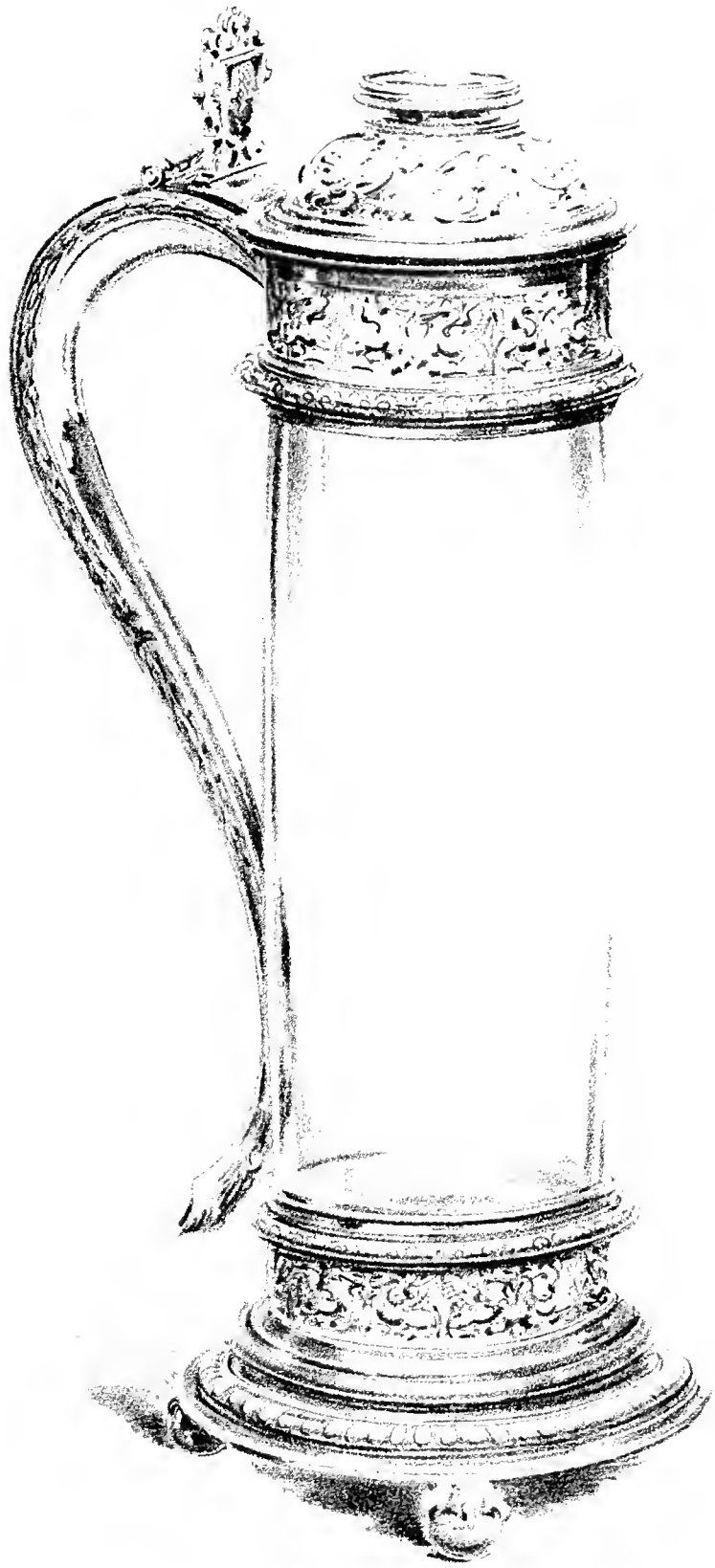
In the British Museum is a glass goblet of Venetian character, 5¼ inches high, and recently acquired, here illustrated. It consists of a semi-oval bowl upon a short moulded stem with a ribbed and gilt knop. The bowl is banded in the middle by strings and white lines, which comprise the inscription in broken gold leaf—IN : GOD : IS : AL : MI : TRVST. Forming part of

[1] Hakluyt, *Voyages*, vol. i. p. 496, edit. 1809.

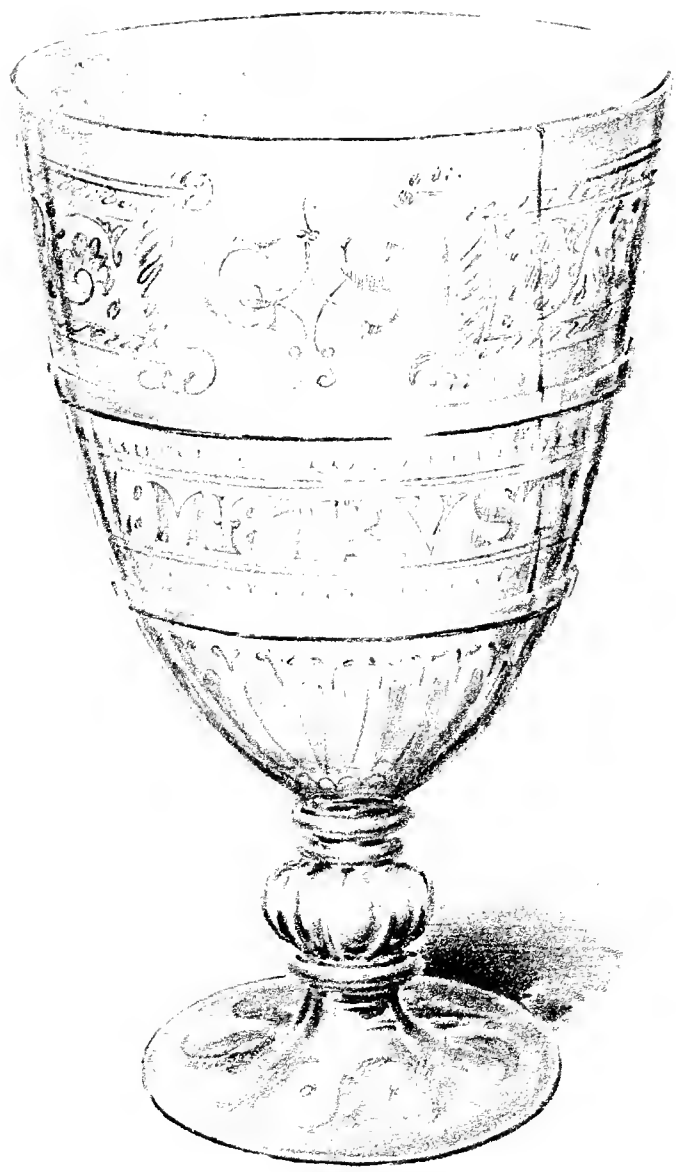
[2] Introd., *S. K. Cat.*, p. lxxxii.

[3] "It is a world to see in these our daies, wherein gold and silver most aboundeth, how that our gentilitie as lothing those mettals (because of the plentie) do now generallie choose rather the Venice glasses, both for our wine and beere, than anie of those mettals or stone wherein before time we have beene accustomed to drinke; but such is the nature of man generallie, that it most coueteth things difficult to be atteined; & such is the estimation of this stuffe, that manie because rich onelie with their new, vnto Murana (a towne neere to Venice situat on the Adriatike sea), from whence the verie best are dailie to be had, and such as for beautie doo well neere match the christall or the ancient *Murrhina vasa*, whereof no man hath knowledge. And as this is seen in the gentilitie, so in the wealthie communaltie the like desire of glass is not neglected, whereby the gain gotten by their purchase is yet more increased to the benefit of the merchant. The poorest also will haue glasse if they may; but sith the Venecian is somewhat too deere for them, they content themselves with such as are made at home of ferne and burned stone; but in fine all go one waie, that is, to shards at the last, so that our great expenses in glasses (besides that they breed much strife towards such as haue the charge of them) are worst of all bestowed in mine opinion, bicause their peeces do turn unto no profit."—Harrison, *Description of England*, Book II., chap. vi., p. 147, New Shakspere Society, 1877. The above extract does not appear in the first edition of 1577, but was inserted in that of 1586.

Engraving on glass and pewter was carried on in the Liberty of St. Martin le Grand, by Anthony de Lysle in 1585.—"Letters of Denization," *ut sup.*, vol. viii., Preface, p. xlvi.



26.—LORD BURGHLEY'S TANKARD.



27—ENGLISH GLASS—"FACON DE VENISE."

a deep ornamental border round the rim are the letters G S, united by a knot, twice, and the date 1586 (Plate 27). At this time Verzelini was the only person allowed to make glasses "façon de Venise" in England, under a Patent for twenty-one years, granted 15th Dec. 1575. It is improbable that a glass with an English inscription would at that time have been made to order in Murano, indeed the importation of such glasses was by the same instrument prohibited during its term. We must therefore claim the one under notice as the work of "Jacob a stranger dwelling in the Crutched Friars, and making all mann^r of counterfayt Venyse drinkinge glasses,"[1] as we know for certain he was doing from the beginning to the end of the term of his Patent. The motto is not of unusual character for art objects, and the glass was no doubt made or decorated for a worthy of Elizabeth's time, and his initials, or those of himself and his fiancée added, as the knot uniting the letters suggests, thus constituting it a betrothal glass. It is probably the only remaining example that may with confidence be attributed to Verzelini's hand, and is a most interesting relic.

In 1589 we have the testimony of Miller and Scott to the high quality of glasses of all sorts then made in England by Englishmen. What these glasses were like we have, perhaps, no certain tangible evidence. It is probable that they were much less fragile than Venetian glasses. Although the latter would appear to have been appreciated in England by some of the upper classes, they are very rarely mentioned in seventeenth-century inventories or expense books, and must have been too delicate for any but occasional use, or for the adornment of cabinets, considering the robust—not to say rude—English tastes and habits in Elizabeth's spacious days. But the Queen, like all the kings and princes of those times, naturally desired and affected to have the science of making Venice glasses in her kingdom.

Somewhat discounting the statement of Harrison by the more reliable evidence of documents, we must further gather that English-made glasses, "façon de Venise," were also only at first to a limited extent popular, because—although Sir Jerome Bowes, in 1592, obtained a Patent for carrying on the manufacture[2]—it is stated in the "Reasons against Sir Robert Mansel's Patent, 16 April, 1624" that "For Venice glasse the first Patent was granted to Jacob Verseleene, on purpose to instruct the natives of these Dominions therein, but the same hath been altogether neglected, and (although that Patent hath continued almost fifty years) but very few Englishmen have been brought up in that Art."[3]

[1] See p. 157.

[2] Appendix, Original Documents, No. VIII.

[3] *Ibid.*, No. XIX.

On the other hand, the taste for home-made glasses, "façon de Venise," had evidently improved under Mansel, because in his "Defence" of Nov. 1624, against the "Reasons" set forth by his enemies, he says that he brought "many expert Strangers from Forraigne parts beyond the Seas, to instruct the Natives in making all sorts and kinds of right Christalline Morana glasses,"[1] and spectacle glasses, and looking-glass plates, and to wholly perfect the work. Other Italians were, as we shall see, employed up to the middle of the century by Mansel, but not specially or necessarily only for making glasses "façon de Venise"—the "glasses of rare and curious sorts," which were, in fact, imported from the Low Countries, and probably a few only from Venice, and exempted from duty by the Proclamation of 25th Feb. 1620. The real revival of Venetian-glass making in England to meet a positive demand was brought about by a patent to the Duke of Buckingham for that purpose in 1663, as will duly appear.

[1] Appendix, Original Documents, No. XX.

CHAPTER VI.

LORRAINE AND NORMANDY GENTLEMEN GLASS-MAKERS IN SUSSEX AND SURREY —REMOVAL OF THE FORMER TO BUCKHOLT WOOD, HAMPSHIRE—THEIR PROGRESS WESTWARD TO NEWENT IN THE FOREST OF DEAN, TO GLOUCESTER, TO STOURBRIDGE, AND NORTHWARD TO NEWCASTLE-ON-TYNE.

MENTION has been made in the preceding chapter of the arrival, on two occasions, of Italian glass-makers in England, firstly in 1549, when they worked for the King, producing Venetian glasses only, and not pretending to teach their "mistery" to others; and secondly in 1575, when Verzelini came, avowedly to teach the art of making Venetian glasses to the English. We know for certain that seven of the eight Venetians of 1549 left England in 1551, and that the eighth also departed later, and that Verzelini remained here until his death in 1606.

In the interval, in 1564, De Lannoy came from the Low Countries, under the auspices of the Government, not to teach the rudiments of glass-making to the English, for we have seen that the art had been well understood here from time immemorial, but to give certain information as to the practice of the science in his own country. De Lannoy also made no stay here; he was a dreamer, an alchemist, and seems to have found us at least rather credulous. Cecil says of him in his Diary, 10th Feb. 1567, that he "abused many in promising to convert any metal into gold."[1]

In 1567 we have Carré and Briet introducing a number of French glass-makers from Lorraine and from Normandy,—the latter, perhaps, glad to flee from religious persecution,—and obtaining a Patent for making glass for glazing in England. The wording of this Patent as to the teaching of Englishmen must be considered, together with the known state of the art of window-glass

[1] *State Papers*, Domestic, vol. xxxvii., No. 3.

making in England in the first and second quarters of the sixteenth century. To take neither earlier nor later tests, the wording is to be judged by the documents and the still existing glass in the Chapel of King's.

The coming of the French Huguenots in 1567 was certainly a more notable event than could possibly have been foreseen. Within a few years this movement gave an impetus to glass-making of all kinds in London, in Sussex, and during a long period later on at Stourbridge, and at Newcastle-on-Tyne. The foreigners now did not return to their place after a short visit, as their predecessors had done. They remained and induced their relations from Lorraine to join them; and these allies were in addition to the glass-makers from Normandy, who similarly stayed in England and in like manner increased their number. The Parish Registers of Wisborough Green, Sussex, give the names, between 1581 and 1600, of Tyzack, Henzy, Tyttery, Bongar, Cockery,—Du Thisac, De Hennezel, De Thiétry, De Bongar, De Caqueray,—and show that at Alfold was buried John Carry (Carré), "M^r of ye glashouse,"[1] 23rd May 1572.

In the glass-house at Beckley, near Rye, in 1579, a stray Venetian, Sebastian Orlanden, and Frenchmen from Lorraine, Delakay, Okes, and Sondaye Exanta made bugles, "amells," and "glasse in collers," *i.e.* coloured glass. There was also a furnace at Nordiham. In 1581 complaints were made by the Mayor and Jurats of Rye of the wasting of the woods near those ancient Cinque Ports, Hastings, Rye, and Winchelsea, by the iron and glass-houses. But the point of the grievance was, as in Warwickshire, that "the glasse-houses remove and follow the woods with small charge, which the iron-works cannot so easily do."[2] Aubrey states that eleven glass-houses at Chiddingfold, Surrey, were put down during the reign of Elizabeth, and others were petitioned against at Hindhead. Longe wrote to Burghley to the same effect in 1589.[3] Jacob du Houx married

[1] Much valuable information concerning the families of De Hennezel, De Thiétry, and Du Thisac, their establishment in England at Stourbridge, and at Newcastle-on-Tyne, their families and intermarriages, and with regard to glass-making in England, has been brought together by the late Mr. H. Sydney Grazebrook in his *Collections for a Genealogy of the Noble Families of De Hennezel*, etc., privately printed, 1877. The Rev. A. W. Cornelius Hallen has supplemented Mr. Grazebrook's researches by notes upon "Glass-making in Sussex, Newcastle, and Scotland," of great interest, printed in the *Scottish Antiquary*, 1893, p. 145, and the author is indebted to Mr. R. Garraway Rice for extracts from the Parish Registers of Wisborough Green. In addition to these sources of knowledge the Rev. T. S. Cooper has a work in hand upon Chiddingfold Parish, and its Glass-Houses, mainly drawn from original documents.

[2] *Hist. MS. Comm.*, Report XIII., App., pt. 4, p. 62. So long before as in 1556, and *à propos* of the inferior quality of the iron produced in England for the use of the king's armourers, the increased cost of wood was urged as a reason for closing all iron-mills in England. Spanish iron was then five marks the ton as against nine marks for English.—*Archæological Journal*, vol. lii. p. 123, "An Elizabethan Armourer's Album;" paper by Viscount Dillon.

[3] See Appendix, Original Documents, Nos. VI., VII.

Anne Tyzack and had a family at Stourbridge. He appears to have removed afterwards to London. Isaac du Houx was in the glass-house at the Hyde, Cheshire, 1616-1621.

In addition to the three Lorraine families of "gentlemen glass-makers," and the members of the ancient Norman houses of De Bongar, Le Vaillant, and De Caqueray, and the other foreigners already mentioned, we have the De Bigault family from Lorraine,—Bago, Bigo, Bagge. Jeremy Bago was married to Suzanna Henzey at Oldswinford in 1619. He had a glass-house at Greenwich, and, with his English partner, Francis Bristow, gave trouble to Mansel—as so many did—later on. In 1623 Abraham Bago had a glass-house in the Isle of Purbeck, where Mansel's works failed, and another Bago settled in Ireland.

Besides the glass-making centres in the Weald at Chiddingfold, Kirdford, Wisborough Green, Loxwood, Petworth, and Horsham, already spoken of, and those in the district of the Cinque Ports, there was another at Alfold, just within the borders of Surrey, where John Carré, "M^r^ of ye glashouse," was buried in 1572. The foreign names of Brasso, Perres, Pereor, Bosson, and Parnys also occur in parish registers in the early part of the seventeenth century, locally in connection with the Sussex glass-works. Mr. Evelyn tells us that his father brought over glass-workers after the massacres in France and settled them on his estates in Sussex, where they remained for many generations. Thus were the foreigners scattered about the country before the end of the first quarter of the seventeenth century. All these men fell—not without complaints, contumacy, and resistance—under the dominating monopoly of Mansel. They found it better, however, to stay and endure the ills they had, than return to others they had some of them fled from, and all knew of. They intermarried with the English, and their names were gradually adapted into English equivalents; the bulk of them certainly prospered, and, like the Italians and Altarists in the Low Countries, they became gradually merged into the people.

In his letter of 1589 Longe speaks of other men erecting divers glass-houses in sundry parts of the realm, and moving on from place to place, consuming the woods. In all probability he alludes to the glass-houses in Sussex, spoken of above, and others to which we shall presently refer. It was probably also in consequence of complaints, and the suppression of some of the Sussex glass-houses, that certain of the De Hennezel, De Thiétry, and Du Thisac families, gentlemen glass-makers from Lorraine, betook themselves to the West of England, when their contract with Carré expired. It will be remembered that the latter had a furnace at "Fernefol" and one in London. But it should be borne in

mind that the Lorraine men were not refugees fleeing from their country for a livelihood. On the contrary, the De Hennezels made the agreement with Carré being still resident in Lorraine. They were persons of some position, members of the lesser nobility, who, having practised glass-making at home, as their Decrees allowed, desired to continue to do so in England with the free exercise of their religion, which actually was, or was likely to be, denied to them at home. Hence they did not choose to teach the English their particular practices; as Longe states, they would "by no means" do it; they did not come for that purpose, and they did not agree to do so, anything in Becku and Carré's Patent to the contrary notwithstanding. The fact of the Lorraine gentlemen glass-makers being associated with Becku and Carré was an incidental, not an essential, feature of the business in hand; the Normandy men under Briet could have done all that was proposed.

The agreement of the De Hennezels with Carré, dated 22nd April 1568,[1] was for nine years, to begin from the day that they should set to work. It is certain that there was no delay, and consequently they would be free at the end of April 1577 to take the control of, or work in a furnace elsewhere. This they made preparations for doing, in or just before 1576, assisted by Tysacks, Houxes, and other foreigners, no doubt first brought over as their assistants, as alluded to in the agreement with Carré. A glass-furnace was established at Buckholt Wood, then a vast beechwood forest on the line of the Roman road, about two-thirds of the way between Winchester and Salisbury. These men had been working at Carré's furnace at "Fernefol," and it was the growing dislike in Sussex to glass-houses that seems to have caused them to seek a new home.

In 1860, on a site at Buckholt farm, long known as "the bottle factory," from the quantity of fragments of glass scattered over it, the foundations of the old glass-house were uncovered, and its rather puzzling plan completely exposed. The walls of the rectangular central furnace were built of brick, with flint walls surrounding it and striking out from it at the four corners, forming rectangular chambers for the glass-pots (Fig. 157). The whole building was comprised within a circular trench. A mass of wood ashes was found, and "burnt flints in some quantity." Whether these were specially calcined for use in the frit, or were parts of the walls adjacent to the furnace, there is no evidence to show. Most significant for the purpose of the present work are the fragments of glass which were revealed, because they furnish dated portions of glasses which were made in England at a particularly important time in the history of the art, and of which,

[1] Appendix, Original Documents, No. IV.

with so very few exceptions, no complete specimens have survived. The fact of the Buckholt glass-house being situated on the line of the Roman road led at first to the idea that it might have been of Roman origin, and this was strengthened by the accidental presence among the *débris* of a piece of Roman pottery. It is probable that the situation near a Roman road was partly occasioned by the ancient way being still in use in the latter part of the sixteenth century. Fortunately the whole of the objects found at Buckholt were submitted to Mr. H. Syer Cuming, most reliable of antiquaries, who reported upon them as follows:—

The fragments of glass transmitted are of several colours, the majority being of two shades of green, viz. an olive and an aqua-marine. There is also a quantity of dingy greenish-white glass, a few pieces of colourless glass, and several pieces of a rich blue. Judging from the examples, we should be led to infer that the whole was mere *cullet*, collected together for re-melting, but among the mass may be selected certain fragments which indicate the contour of the vessels of which they once formed portions. The fragments of blue glass furnish remains of the rim and base of cups: the upper part of a cup, the rim of which is bent down and extended laterally in a peculiar manner; the mouth and conic neck of a good-sized bottle; the curved handle of a jug or cup; and a tri-lobed handle of a (saucer-shaped?) vessel. There are two similar handles of the green glass to which traces of the blue vessels are still attached. Neither the olive nor the aqua-marine coloured glass present any remarkable forms; but mention may be made of a solid conical base with remains of the stem of a vessel; the creased edge with portion of the handle of a cup; and a ribbed knob, which may have surmounted the cover of a vessel; all of the olive tint. The dingy greenish-white group contains remains of tubular necks of flasks, and portions of the mouths of bottles, which may be compared with one engraved in the *Journal* (viii. 324). Also broad circular feet of tall drinking-vessels with tubular hems, the largest being $3\frac{1}{4}$ inches in diameter. A fragment of a lower part of a tumbler-shaped vessel, of thin pale green colour, with beaded edge similar to examples dug up in London with objects of the first half of the seventeenth century. Of colourless glass there is a fragment of a slender stem, and a part of a curved handle decorated with seven spirals of opaque white enamel; both are Murano work of the sixteenth century. There remain three fragments demanding special notice, as they differ in ornamentation from the other pieces. Two are portions of vessels of dingy green glass, one bearing three stripes of white enamel, the other having five spots of the same material, bringing to mind the "slip" adorned pottery of the seventeenth century. The third fragment is of importance, as it appears to be the most ancient of the whole of the specimens sent, and upon this a positive opinion may be pronounced. It is a portion of a small quarry of painted glass of the fourteenth century; the device being a disc of open circlets, placed upon a cross.

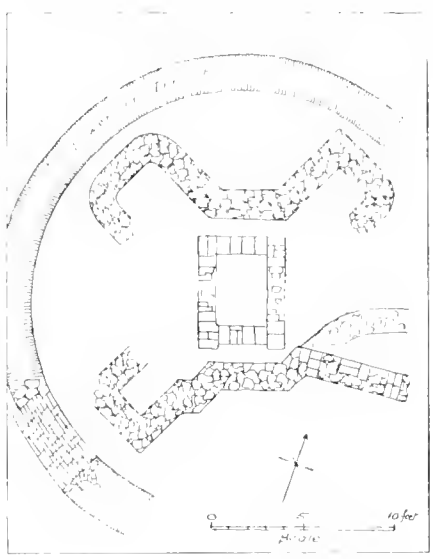


FIG. 157.

Among the pottery are portions of melting-pots, of which five of the fragments are of gray earth, varying in thickness from about $\frac{1}{2}$ inch to full $1\frac{1}{5}$ inch. The sixth fragment is nearly 1 inch thick, composed of red terra-cotta. The interior of these pieces are coated with

blue, green, and light-coloured glass, *identical* with the examples already described. These pots seem to have been fabricated in the same manner as now practised, *i.e.* built up of rolls of clay pressed firmly together, giving the outer surface a somewhat ornate appearance. The other pottery consists of a portion of the edge of a stout Roman mortarium of red terra-cotta, scored with cris-cross lines; a fragment of a thin vessel of hard stone-coloured terra-cotta, *possibly* of Roman fabric; part of the rim of a dish of brown glazed-ware with yellow scorings, of the sixteenth century, and two fragments of brown stone-ware of the time of Elizabeth or James I.

Such is a careful analysis of the remains submitted for inspection, and the inferences deducible therefrom may be stated thus:—First, we have one piece of undoubted Roman pottery, and one piece which may *possibly* be Roman. Secondly, we find one piece of painted glass unquestionably of the fourteenth century, two fragments of Murano glass of the sixteenth century, the base of a tumbler-like cup of the seventeenth century, and three fragments of pottery of the sixteenth and seventeenth centuries. Thirdly, we find a mass of fragments of vessels of glass of various hues, none of which can be considered older than mediaeval times. There is such a uniformity in colour and design in Roman glass discovered in this country and the Continent, that some have supposed the provinces received their supply from the seat of Empire in Italy; whilst others have thought each province had in all probability its glass-factories as well as its potteries. If this latter assumption be correct, it might be argued that the remains obtained at Buckholt farm are examples of Romano-British glass; but the whole current of evidence negatives such an hypothesis. We ought not to lose sight of the important fact of the presence of large quantities of window-glass; for though the Romans sometimes glazed the windows of their villas, glazing to any extent was certainly not much in vogue until long after the Roman rule had ceased in Britain. It is further worthy of notice that the window-glass employed in ancient times was *cast in plates*, whereas that now discovered exhibits distinct and unmistakable proofs of being *blown*, the thick hem being well preserved in one of the examples. These accumulated facts bring conviction to my mind of the comparatively recent origin of the furnace and its contents, an origin which in all probability dates from about the middle of the sixteenth century. The discovery is interesting as probably furnishing evidence of the remains of the earliest glass-factory noticed in this country.[1]

Mr. Syer Cuming's opinion, which one naturally takes as conclusive in itself, has been corroborated thirty years after from an unexpected quarter—the Registers of "L'Église Wallonne de Southampton." In the list of those who made profession of their faith, and were admitted to the Lord's Supper, are the following:—

1576. 7 October.

Jan du Tisac
Pierre Vaillant
Glaude Potier
} ouvriers de Verre a la Verriere de boute haut

1577. 6 October.

Monsieur de Hennezé et s. f.
Louis de Hennezee
Arnoul Bisson
Jan Perné
} tous de boc-quehaut.

[1] *Journal, British Archaeological Association*, vol. xvii. p. 57.

1577. 7 October.
Jan Buré, J.F. (*i.e.* Bachelor)

1579. 4 Janry.
Monsr. du Hou. Verrieren, a bouque haut.[1]

It can be no mere coincidence that the Wallon Registers just quoted should show the gentlemen glass-makers at Buckholt first in the very year of the termination of their agreement with Carré, and these slight documents show the direction which was taken by foreign glass-makers in their wanderings here. Amateurs of costume can easily picture the appearance of these honest, God-fearing gentlemen, after months of toil smartening themselves up and speeding along the Roman road to Winchester, bound for the temple of their faith 12 miles further on at Southampton. They must have worn small gray hats, high off the forehead, with plumes of feathers *en aigrette* in front, wide single ruffs, very short dark cloaks, thrown open, and dark *justaucorps*, *chausses*, and *bas de chausses*. And each man would have carried on his left hip his glass-maker's compasses fitted with quillons and closed for use as a dagger, after the manner of the time;[2] but we must pass on.

The history and *personnel* of the Buckholt furnace are therefore more clearly established than those of any other old glass-house in England; and it is particularly noticeable, from the remains found, that more glass was made here for vessels than for windows. The De Hennezels came avowedly to make window-glass, and nothing else;[3] at Buckholt they turned their attention to vessels also. Was this because they found their window-glass was not much wanted in England, inasmuch as the natives made it themselves, and—as for King's Chapel less than half a century before—better than the aliens could do so? The vessels from Buckholt would have been distributed throughout the country, according to the custom at that time, by pedlars or "glass men"—"qui portant vitra ad dorsum,[4] who had certain privileges later on under the Statute of Vagabonds passed in the

[1] "Registre de l'Église Wallonne de Southampton," *Publications of the Huguenot Society*, vol. iv.; Mr. Hallen, *Scottish Antiquary*, 1893, p. 149, not being aware of the Buckholt discovery, placed the site of "bocque haut" as possibly at Wisborough Green, Sussex, where the names of Tyzacks, Tytterys, Hennezels, and other foreign glass-makers occur in the parish registers during the last quarter of the sixteenth century.

[2] The portrait of Ralph Simons, architect of Sidney and Emmanuel Colleges, Cambridge, and preserved at Emmanuel, represents him holding a large pair of compasses, formed for use when closed as a dagger, with the hilt and quillons inlaid in silver. A pair of gunner's callipers of steel, fashioned in the form of a dagger, with the grip damascened in gold and silver, was exhibited by Mr. A. Gibbs to the Society of Antiquaries, 19th May 1892.—See *Pro. Soc. Ant.*, 2 S., vol. xiv. p. 172.

[3] See Appendix, Original Documents, No. IV.

[4] A Venetian Decree of 1279 thus mentions German hawkers of glass.—Introd., *S. K. Cat.*, p. lxxvij.

Parliament of 39 Elizabeth (1597), at whose opening Mr. Speaker Yelverton gave such a curiously grotesque character of himself.[1]

We know from the remains found at "the bottle factory" that the furnace on that spot was a foreign and a French one;[2] but it is certain that there were also English glass-houses at Buckholt, because Mansel, in his "Defence" of 1624,[3] alludes to the wood of great extent there which was wholly consumed by glass-makers—a result which could not have been arrived at by a single and limited body of foreigners at one glass-house. Of course all paid for the wood that they used, but no rent to the Crown. Mansel alludes also to the consumption of woods by glass-makers in all parts, and he says that in Warwickshire the people rose in tumult, with curses and imprecations, and expelled the glass-makers. These were assuredly natives, or Mansel would have stated to the contrary. So thorough was the eviction, and the effect of the subsequent action of Mansel, that in Houghton's list of 1696[4] only one glass-house had been revived, namely, at Coventry; there was then no glass-house in Hampshire. Mansel makes no mention of foreigners working glass-houses, but his statements show how many unlicensed native glass-houses there must have been up to the time when he obtained the sole concession for the kingdom in 1623.

It may be taken that the duration of the French furnace at Buckholt was only coincident with that of the wood fuel conveniently to be obtained, and we accordingly find that the gentlemen glass-makers moved to the Forest of Dean, where wood was then plentiful enough.[5] In how many places they settled in or near the Forest we know not, but the Parish Registers of Newent, on the borders of the Forest of Dean, contain the following entries:—

1599.—May 6. Baptized Thomas, son of Anthony —— of the glasse-house.
1599.—Oct. 29. Baptized, Tyzack Abraham, sonne of a frenchman at the glasse-house.
1601.—Feb. 24. Margaret —— daughter of Anthony Voydyn, glass-founder.[6]

Was it a simple coincidence that the Frenchmen should settle in the middle of the

[1] The excellent effigy of the learned Sir Christopher Yelverton, in his full robes as Justice of the Queen's Bench, lies on an altar tomb beside that of his wife in the beautiful Church of Easton Maudit, Northamptonshire. There also reclines the effigy of his son, Sir Henry Yelverton, Judge of the Common Pleas, with that of his wife.

[2] Lorraine was one of the Grands Fiefs of France and the last united to the Crown, viz. in 1735.—See *Abrégé Chronologique des Grands Fiefs.* Brunet, Paris, edit. 1759.

[3] See Appendix, Original Documents, No. XX.

[4] Houghton's *Letters for the Improvement of Trade and Husbandry*—"List of Glass Houses in England and Wales," 15th May 1696, Appendix, No. XXXIII.

[5] See *Penny Cyclopaedia*, vol. xi. p. 266, for information concerning the granting, wasting, and re-afforesting of the Forest of Dean for the uses of the navy in the time of Charles I. and Charles II.

[6] *Scottish Antiquary*, ut sup., p. 151.

little Newent coal-field? The license for the invention of coal-heated glass-furnaces was first granted in 1610,[1] and the system was then by no means perfected.

It will readily be allowed that some firm legislation was necessary when a body of foreigners could steadily move from place to place where wood was abundant, use it for fuel, paying only a small price for it, and conduct a lucrative business free from rent or royalty. How many of these unlicensed glass-houses there were in 1600 it is impossible now to ascertain. The fifteen furnaces in England, which Longe proposed in 1589 to reduce to two, must have been principal establishments only; the minor ones—"divers glass-houses in sundry parts of the Realme"—were being protested against or summarily suppressed locally. Paul Hentzner, the traveller from Brandenburg, was in England in August and September 1598, and makes a note that "glass-houses are plenty here." The prohibition of wood as fuel was most opportune. It was the natural result of the invention of coal-heated furnaces, without which the glass industry must have left the country in order to save the woods for the navy. The prohibition soon brought about the entire cessation of many glass-houses, such as those in Sussex, and divers parts, where coal was not procurable, the removal of others to coal districts, and the opening of new glass industries in fresh centres.

From the Forest to Stourbridge was no great distance, and it is manifest that the Stourbridge clay had been used for making glass-makers' pots some years before the glass industry itself was carried to that place. A lease was granted in 1566 for digging glass-house pot-clay there, but the exact date of the introduction of glass-making into Stourbridge has not been ascertained. There would have been no special attraction there for glass-makers beyond the presence of the clay, which was perhaps comparatively a small, though a necessary, item of their needs, before the Proclamation of 1615 against wood.[2] After that year the woods of the Forest were denied to the glass-makers by law, and the alternative fuel, coal, had to be sought; consequently the Lorraine gentlemen should appear at once in the neighbourhood of Stourbridge. As a matter of fact, John, son of Paul and Bridget Tyzack, was baptized at Kingswinford, 26th April 1612, and seven members of the

[1] See Appendix, Original Documents (Abstract), No. IX.

[2] Plot, in his *Natural History of Staffordshire*, published in 1686, says, under Amblecote: "The goodness of the clay and the cheapness of the coal thereabouts, no doubt has drawn the glass-houses, both for vessels and broad glass, into these parts, there being divers set up in different forms here at Amblecote, Oldswinford, Holloway's End, and Cobourne-brook."

Henzey family alone are shown by the parish registers to have had children in Oldswinford and Kingswinford between 1615 and 1630, and their names are recorded in the former place up to 1780, and in the latter from 1625 to 1729. At Amblecote also the Henzeys were settled as glass-makers, and had a long succession. They continued as glass-makers at or near Oldswinford up to the present day, intermarrying with the local families of Pidcock, Croker, Dixon, Jeston, Brettell, Bate, and others; all these details are borne out by the entries in the parish registers.[1]

Of the Tytterys the information is but meagre in the neighbourhood of Stourbridge. They were glass-makers at Oldswinford, and one of the family married Thomas Rogers, a glass-maker at Amblecote, and became the great-grandmother of Samuel Rogers, born 1763, died 1855.[2]

The Tyzacks were glass-makers at Oldswinford from 1622 to 1729.[3] Members of the family of this calling are entered in the Registers of St. Nicholas, Gloucester, seemingly of the end of the seventeenth century.[4] In Houghton's list of glass-houses in England in 1696[5] he gives three in Gloucester, all making "bottles." At Stourbridge, the only place where glass was then made in Worcestershire, he quotes seven houses making window-glass, five making bottles, and five "flint green and ordinary."[6]

In brief:—First, we had the Henzeys, Tytterys, and Tyzacks in Sussex; then the Henzeys and Tyzacks at Buckholt; then the Tyzacks at Newent, and later at Gloucester; and finally, we meet with all three families at Stourbridge, where they settled. Thus, without attempting to extract from the slight but irrefutable documents more than they properly give, the western track of the Lorraine glass-makers becomes assured, the evidence being both cumulative and convincing. Would that we could point to examples of drinking-glasses made at the Frenchmen's furnaces at this time in England! These early glass-makers at Stourbridge must have worked under a license

[1] H. S. Grazebrook, *Collections for a Genealogy of the Noble Families*, etc., *ut sup.*, pp. 12, 32, 102.

[2] *Ibid.*, p. 16.

[3] *Ibid.*, p. 111.

[4] *Scottish Antiquary*, ut sup., p. 151: "At the lower end of the town near the river is a glass-house where they make great store of glass bottles selling 15 to the dozen for which I was fain then to pay 4s. for every dozen quart bottles . . . at the glass-house now in Gloucester they sell quart bottles."—Baskerville's Journeys, Gloucester (1682), *Hist. MSS. Com.*, Rep. XIII. pt. 2, p. 294.

[5] Appendix, No. XXXIII.

[6] At the beginning of this century there were about ten glass-houses at Stourbridge; at the present day the manufacture still holds a principal place. The Brierley Hill Works of Messrs. Stevens and Williams, founded in 1776, and those of Messrs. Webb, take a high position for "artistic glass" to suit the modern taste. From both establishments the reproductions of Old English cut glasses, full of "fire" and "colour," are as good as they can be of their kind.

from Mansel when, by virtue of the Patent of 1623,[1] he tightened his grasp upon the industry which had been handed over to him.

It is apparent from the parish registers of the glass-making districts of Surrey, Sussex, of the neighbourhood of Stourbridge, and of Newcastle-on-Tyne, that the five Lorraine glass-masters, De Hennezel, De Thiétry, Du Thisac, Du Houx, and De Bigault, with certain assistants, alone went westward, and that the Norman gentlemen, De Bongar, De Caqueray, Perres, De Brossard, and their workmen, stayed in Sussex as long as the use of wood fuel was allowed. At the same time that the Lorraine glass-makers were moving from the Forest of Dean, viz. about 1615, other members of these families pushed on to what was then the northern centre of the coal-fields, Newcastle-on-Tyne, where, if they arrived after May 1615 and established glass-furnaces, these would have been on the new system. There is no evidence to show that glass was made at Newcastle before 1615,[2] the year of the Proclamation for the prohibition of wood, and of the extinction of, or withdrawal of protection from, the three then existing Patents under which glass was made with wood-heated furnaces.[3]

Sir Robert Mansel obtained a Patent, 19th January 161$\frac{4}{5}$, with eight others—one of whom was Thomas Percival, the perfecter of the new process, and who is actually called the "first inventor"—for making glass with coal, and the business not succeeding, he bought them out and set to work by himself. After establishing glass-houses successively and unsuccessfully in London, the Isle of Purbeck, at Milford Haven, where he used Pembrokeshire coal, and in Nottinghamshire, he finally succeeded at Newcastle-on-Tyne,[4] aided by the good sense of Dame Mansel. His career will be touched upon later on. His attempts in other places can only have been of short duration, and he must have founded a glass-house at Newcastle-on-Tyne before the end of

[1] See Appendix, Original Documents, No. XVIII.

[2] "Notwithstanding what Bourne and others say, I do not think there is any proof that glass works existed either in the neighbourhood of Stourbridge, or on the banks of the Tyne, before the year 1615 or thereabouts, when a Patent was granted to Sir Robert Mansel, Knt."—H. S. Grazebrooke, *ut sup.*, p. 10.

Both Bourne, *History of Newcastle-on-Tyne*, 1736, and Brand, *ibid.*, 1789, valuable as their histories are in other respects, wrote their accounts of glass-making on the Tyne without the aid of all the State documents which are now placed within the reach of the public. Bourne ascribes the coming of the Hennezeys, Titterys, and Tyzacks to Newcastle in the reign of Elizabeth, and Brand puts the establishment of glass-works on the Tyne at about 1619. It is not an easy question to decide, but the course of the history of glass-making points to the latter date. The subject has also been touched upon by J. Clepham, "The Manufacture of Glass in England;" "Rise of the Art on the Tyne," *Archæologia Æliana*, New Series, vol. viii. p. 123, 1880.

[3] See Appendix, Original Documents, No. XVIII.

[4] *Ibid.*, No. XX.

1617, because the Registers of All Saints', under the date 11th February $161\frac{7}{8}$, give the entry of "Edward Henzey servant to Sir Robert Mannsfield[1] was buried." It thus appears that Mansel had in his employ, on his breaking ground at Newcastle-on-Tyne, at least one member of the Henzey family.

It can be no mere coincidence that from 1620 Perigrine Henzey of Oldswinford and his young nephew and niece, Edward and Jane, cease to be recorded in the registers there. The inference is, that they must have gone to Newcastle about two years after the death of their kinsman Edward, "servant" to Mansel. Again, the name of Perigrine is associated frequently with that of Henzey at Newcastle. This may be accounted for either by its transmission from father to son in the usual way—a system so harassing in the drudgery of the compilation of a pedigree[2]—or by the desire to mark the fact of their wanderings and settlement in foreign land, for *perigrini et advenae* they truly were.

The Tyzacks soon followed the Henzeys, for the baptism of "John son of Tymothie Teswick, glass-maker, a Frenchman," occurs 22nd November 1619. Some of the Tittory family also came to Newcastle at the same time, and the Registers of All Saints' contain upwards of six hundred entries of marriages, baptisms, and burials of Henzeys, Tittorys, and Tyzacks between 1619 and 1750; the entries have not been extracted beyond these dates. The persons mentioned are, with few exceptions, described as "glass-makers" or "broad glass-makers."[3] The items show how much the three families intermarried, and how firmly settled they were, though strangers and pilgrims, in the town where glass-making, mainly through their endeavours in the seventeenth century, and the leading of Mansel and his English allies, became and has since remained a staple of the place. The history of this industry has, in fact, run its course at Newcastle-on-Tyne on just the same lines as at Stourbridge; and, as at Liège[4] and other towns of the Low Countries during the same period, the foreigners, with changed patronymics, became gradually merged with the natives. We now leave the Lorraine episode and return to the main English story.

[1] The name was often spelt thus, and by Mansel himself, at least on one occasion.

[2] There were, for instance, six Sir Thomas Greenes in succession lords of Greene's Norton in Northamptonshire. Maud, one of the two coheiresses of the last Sir Thomas Greene who died in 1506, married Sir Thomas Parr of Kendal—of Greene's Norton in right of his wife—and by him was mother of Katherine, sixth wife of Henry VIII., and who took as her fourth husband Thomas, Lord Seymour of Sudeley. John Greene, of whom we shall hear a good deal later on, was a cadet of the Greene's Norton family.

[3] H. S. Grazebrook, *ut sup.*, p. 112.

[4] See Introductory Notices, p. 31.

CHAPTER VII.

PATENT TO SIR JEROME BOWES—TO SIR PERCIVAL HART AND EDWARD SALTER—TO SIR WILLIAM SLINGSBY AND OTHERS—TO SIR EDWARD ZOUCHE, THOMAS PERCIVALL, AND OTHERS—THE NEW PROCESS—RE-GRANT TO ZOUCHE, PERCIVALL, AND OTHERS—NEW PATENT TO A COURT COMPANY, INCLUDING SIR E. ZOUCHE, PERCIVALL, AND SIR ROBERT MANSEL—PROHIBITION OF WOOD FUEL BY PROCLAMATION—INTRODUCTION OF COAL IN FURNACES—LETTERS PATENT.

THE License to Verzelini, granted in 1575, was to expire in 1596. Accordingly Sir Jerome Bowes—who exhibited so bold a front to Ivan the Terrible on the occasion of his embassy from Elizabeth in 1593[1]—obtained, 5th February 159½, a Special License[2] for twelve years, at a rent of a hundred marks, on the termination of the concession to the Italian, to make drinking-glasses "façon de Venise" in England and Ireland, "like vnto such as be moste vsed made or wroughte in the said towne of Morano," "to be as good cheape or rather better cheape than the drincking glasses commonly brought from the Citty of Morano or other partes of beyond the seas." And no other person should during the term of twelve years, "Set on worke or any way counterfeite the said Arte and feate of makeing the said drincking glasses," under heavy fines. It is further stated that, "our intent and meaning is that the said art and feate of makeing the said drincking glasses shall remaine and have continuance within our Realmes of England and Ireland and other our domynions." The importation of all such counterfeit Venice glasses was prohibited, and full powers of search for any such suspected objects granted to Sir Jerome Bowes, and all other furnaces for making them forbidden, as well as their sale by any other person. Under his License Sir Jerome Bowes is also to "finde furnishe and provide to & for the noble men within her Majesties Realme of England & the domynions of the same

[1] This remarkable story is told by Pepys, 5th September 1662.

[2] Appendix, Original Documents, No. VIII.

to drinke in good and sufficient store & quantity of faire perfecte good & well fashioned drinking glasses made or to be made within the Cities or Townes of Venice or Morano comonly called Venice glasses," at reasonable rates and prices, "or els shall suffer the said noble men and others of her pryvy Counsell to make provision thereof only to their owne private vse." It is further stipulated that in the case of "any amytie league & frindshipp" growing up hereafter with the Duke, chief state rulers, and governors of Venice, the grant to Sir Jerome Bowes upon notice may be determined.

In October 1595 a certain Italian named Adrien is mentioned as having been for five years a glass-maker in England,[1] probably under Verzelini. He was now denounced in a letter from an anonymous Jesuit as being occupied in a conspiracy at Rome against England, the plan being to destroy her navy by means of Adrien's invention of "artificial fire-balls the size of a fist that will fire even though in water." This was a recurrence to an ancient mode of warfare known as "Greek fire."[2]

On 8th October 1607 a Special License was granted to Sir Percival Hart and Edward Forcett[3] for twenty-one years, for making drinking-glasses, or other glasses whatsoever, such as are made in Murano, on the determination of the License for twelve years of 5th February 159½, to Sir Jerome Bowes, at the yearly rent of 100 marks, to the prohibition of all other makers of like glasses save such as be appointed during the term by the grantees, or any furnaces for them in England or Ireland. Importation of such drinking-glasses, whether real or counterfeit, was also prohibited, as in the licenses to Bowes and Verzelini. Bowes's Patent expired in 1604; it appears to have been renewed 5th October 1606.

Similar "Licenses" were granted to Edward Salter in 1608, "for the making of all manner of drinking glasses, and other glasses and glasse workes not prohibited by the former Letters Patentes."[4]

On 28th July 1610 a Special License for twenty-one years was granted to Sir William Slingsby, Andrew Palmer, Edward Wolverstone, and Robert

[1] *State Papers*, Domestic, 1595.

[2] See *Journal, Royal Institution*, vol. xiv., paper on Greek Fire by MacCulloch.

Greek Fire was a mixture in which naphtha, sulphur, pitch, and other inflammable ingredients entered. It was of early employment in the East, particularly by the Saracens against the Christians. Its use was continued generally in Europe until the middle of the fourteenth century, when gunpowder was found more efficacious. Gibbon gives a striking description of the modes of its employment, and its disastrous effects. Glass vessels appear to have been first used for Greek Fire by the Saracens in the twelfth century.

[3] Appendix, Original Documents, No. IX. (Abstract).

[4] See *Ibid.*, No. XVIII.

Clayton[1] for the erection of furnaces, ovens, and engines for brewing, dyeing, baking, roasting, brick, tile, and pot making, refining, etc., and for melting glass, ordnance, bell-metal, latten, copper, and other metals, with sea-coal and pit-coal, for the sparing of wood and charcoal. This was an important concession, but from the fact of the Patent being of general application for boiling, melting, and baking, and the grantees frit melters and not specially glass-makers, they failed to take advantage of it. Moreover, in the "Reasons against Sir R. Mansell's Patent, 16 April, 1624,"[2] it is stated that "The Invention of making Glasse with Sea-coale and Pit-coale was practised in severall parts of this kingdome, before the first Patent granted, and so much was apparently proved in the severall Parliaments, whereby the appropriating of the Invention unto the Patentees, and the suggestions unto his Majesty proved to be untrue." In the same document Lord Dudley's testimony is quoted in evidence that two years before the "pretence of a new invention, or any Patent granted, there was glasse made with coale upon his ground by native Glasse-makers, whereby it may appeare that this was no new Invention." The truth seems to be that Slingsby and his partners were merely the first to attempt the practice of the new system of furnaces, devised by others, and still imperfect, on any considerable scale, and call attention to its merits. For this they must have credit; but their pretensions as inventors were groundless, and the new practice made no progress under their hands. In fact, when Slingsby wrote to Salisbury,[3] 26th February $161\frac{0}{1}$, requesting that Sir Edward Zouche and others might not obtain a Patent, for which they were petitioning, of the newly invented furnaces for making glass with sea-coal, saying that it would be an infringement of the License granted to himself and his partners the inventors, for the sole making, using, and authorising under composition of the employment of such furnaces, and praying for a "Declaration in Print" on his behalf,—he added that "our busynes haythe had as yett but slow progression, yett shall those few wee have delte wythall, justyfye the excellency of the Invention." Consequently Slingsby did not obtain a "Declaration in Print" to bolster up his unsuccessful working in the new process; but the Council went beyond him.

On 25th March 1611 Sir Edward Zouche, Bevis Thelwall, Thomas Percivall, and Thomas Mefflyn obtained a Patent[4] to make drinking-glasses for twenty-one years, in which the rights in Bowes's Patent for Venetian glass-making, which appears to have been renewed to him after its expiration in 1604, those of

[1] Appendix, No. X. (Abstract).
[2] *Ibid.*, No. XIX.
[3] *Ibid.*, No. XI.
[4] *Ibid.*, No. XII. (Abstract).

Salter 1608, and those in Slingsby's Patent, granted in 1610, were specially reserved. Under this grant Zouche and his partners spent £5000,[1] clearly with the view of perfecting Percivall's process of glass-making with coal furnaces. Their works were at Lambeth. This "perfection" "plainelie appeared by manifest and demonstrative experience in and by the severall furnaces then latelie erected and built by the said first Inventor Thomas Percivall and his partners."[2] It is probable that some previous practice by Percivall in a coal district with the new furnaces was the usage alluded to by Lord Dudley, in which case Percivall's title, here so frankly allowed, to be their first inventor would be a strong one. But the same claim had also been made by Slingsby in 1610, and allowed in his Patent of that date. So hard is it to track an invention to its source, even when we seem to be within less than measurable distance of it.[3] Obviously between the genesis of the idea of the new furnaces and their "perfecting," that is the closing of the pots, there must have been a wide space. It is certain that coal furnaces were in use for glass-making in many places in England as early as 1608, the employment of a fuel other than wood being the natural outcome of the scarcity of the latter. This primary change only required a modification of the furnaces; the real "Inventor" was Thomas Percivall, the man who further improved the furnaces, Closed the Pots,[4] and, it may reasonably be thought, then introduced oxide of lead in moderate proportions into the frit, for the increase of its fusibility, almost a necessity of the closing of the pots.

The Crown recognised the importance of the new step, and the opportunity was seized for calling in or extinguishing, as their terms allowed, all glass Patents, "growne hurtful and preiudicial to the common weale,"[5] then running, namely, those held by Hart and Forcett, Bowes, Salter, and apparently so much of Slingsby's Patent which, as has been seen, was of general commercial application, as related to glass.

It appears that Sir Jerome Bowes had also placed himself at the head of a company, and in 1613 was petitioning for a Patent for glasses with furnaces on the

[1] Appendix, No. XIII.

[2] See *Ibid.*, No. XVIII.

[3] "The glass invention with pitcol was first effected near the Authours dwelling, namely Greens Lodge."—Dud Dudley, *Metallum Martis*, 1665, p. 35, reprint by Bagnall. Near Greene's Lodge was possibly the scene of Percivall's experiments.

[4] Simon Sturtefant had a Patent in 1611 for making iron with pit coal. In his *Metallica*, published 1612, and reprinted by Bagnall with Dud Dudley's *Metallum Martis*, he states in the Preface that, "very lately by a wind furnace greene glass for windows is made as well by pitcoale at Winchester House in Southwark as it is done in other places with much wast and consuming of infinite stores of billetts and other woodfuell."

[5] See Appendix, Original Documents, No. XVIII.

new principle. His License for making Venice glasses, which implied wood furnaces, had been declared void, and being aware of the general feeling against the use of wood he naturally desired now to work under the new system. But another company which was being formed, and of which Zouche and Percivall were members, was a powerful combination, and the reception of Bowes was not encouraging; for the policy of the Crown then was to limit the number of the Patents. To Bowes, who was an individual of some importance, was offered the compromise of £1000 a year, which he declined.[1] This sum was therefore reserved for the benefit of the evicted patentees,[2] and thus the ground was cleared for a fresh start under the new system, which promised so well.

On 18th July 1613 Sir George More and Sir Edmund Bowyer reported to the King as follows:—

> They have repaired to the glass-house lately erected at Lambeth, by virtue of his letters patent to Sir Edward Zouch and Mr. Louis Thelwall. By judgment of divers glaziers of the city of London, etc. perceived the glass for the metal to be clear and good, but in some places uneven, and full of spots, by reason of the negligence of the workmen. The glaziers affirm to have sundry times bought glass as good and as cheap there as any other of the same size. The fuel used is Scotch coal, and not fuel made of wood. Unlawful practices have been used to overthrow the work, against which it were good some speedy course were taken that the same may better proceed.[3]

Zouche and his three partners now surrendered to the King, 11th February 161$\frac{3}{4}$, their Patent of 25th March 1611, and on 4th March 161$\frac{3}{4}$ a Special License, for making drinking-glasses and all kinds of glass, was granted to Sir Edward Zouche, Bevis Thelwall, Thomas Percivall, and Robert Kellaway[4] (in the place of Mefflyn deceased) for twenty-one years, at the rent of £1000 a year. Steps were being taken to carry a Bill in Parliament for the preservation of woods; this met with opposition, and delays ensued.[5] In the meantime, it appears that certain of the Court were pressing for participation in the benefits they saw were likely to accrue from glass-making under the new process. Hence a fresh Patent was prepared, and granted, 19th January 161$\frac{4}{5}$, to Philip, Earl of Montgomery, Thomas, Viscount Andever, Sir Robert Mansel, Sir Edward Zouche, Sir Thomas Tracy, Thomas Hayes, Bevis Thelwall, Thomas Percivall, and Robert Kellaway, for twenty-one years,[6] for making all kinds of glass with sea-coal, pit-coal, or any other fuel not being timber or wood, at the yearly rent of £1000, the importation of all kinds of foreign glass being prohibited save to the patentees alone.

[1] *State Papers*, Domestic, Nov. 17, 1613.

[2] *Ibid.*

[3] A. J. Kempe, Loseley MSS., p. 494, Addenda, No. 23.

[4] See Appendix, Original Documents, No. XII. (Abstract).

[5] *State Papers*, Domestic, Feb. 23, 1614.

[6] See Appendix, Original Documents, No. XVIII.

Thus, by the inclusion of Zouche and his partners in the new Patent, their License of 4th March 161$\frac{3}{4}$ was swallowed up. On account of their practical knowledge their co-operation was necessary for the prosperous conduct of the business, and the position of the company was made sure by the stringent terms of the Proclamation which shortly followed. This was, as the King put it, "to prevent misgrief arising wherein the Law hath no Provision, until a Parliament can provide;" it was, in fact, an extra, but a provisional protection.

It is almost certain that the improvements brought about by Percivall were crowned by the Closing of the Pots, between March 1611 and February 1614; nearer than this we cannot get; and this marks an epoch in the history of glass-making, resulting eventually in the manufacture in England of the most brilliant crystal glass ever produced in the world, and the revolutionising of the practice of the art.

It was obvious that unless the use of wood was absolutely prohibited, as well as the importation of glass, the commercial success of the new process could not be assured; therefore, four months after the granting of the new Patent to Zouche and the Court Company, the Council, having become quite sure of their position, issued the famous *Proclamation touching Glasses*, 23rd May 1615,[1] a very opportune and prescient document, prohibiting the use of wood in furnaces for glass-making, and ordering that it be made only with sea-coal or pit-coal, or other fuel not wood, on account of the waste of timber, the value of which for shipping is seriously dwelt upon: "And although the case doe so import the State of this our Kingdome, as it were the lesse evill to reduce the times unto the ancient manner of drinking in Stone, and of Latice windowes, then to suffer the losse of such a treasure." The importation of foreign glass was by the same Proclamation rigorously interdicted; and on 1st June, upon further consideration, all glasses forfeited under it were granted to the members of the company to whom the new Patent had been conceded.[2] On account of his former rents from the old glass-works an annuity of £600 was allowed to Sir Jerome Bowes out of the profits of the new Patent.[3] He died in the following year.

The introduction of the use of coal in furnaces was more significant and far-reaching in its effects than at first sight appeared, and by the prohibition of wood and the banning of foreign glass an important point in the history of glass-making in England was emphasised. The country was now entirely thrown upon its own resources as regards glass of all kinds, and local industry was

[1] Appendix, Original Documents, No. XIV.

[2] *State Papers*, Domestic, June 1, 1615.

[3] Appendix, Original Documents, No. XV. (Abstract).

almost suddenly called upon to supply its rapidly increasing requirements in this respect. It was a bold movement, but retarding causes were now being cleared away. Chief of these, as we have seen, had been the granting of monopolies more or less oppressive, according to circumstances, and common under Tudor and Stuart monarchs, to persons who may or may not have been original inventors, and which, it was asserted, tended to the raising of the prices, the deterioration of the commodities, and the impoverishment and grinding down of the artificers.[1] But the Act of 21 James I. (1624), which abolished monopolies of the more mischievous kind, established the granting of Letters Patent for fourteen years, or less, to the actual inventor of a new process or method of manufacture. This is the foundation of the present law of Patents.

It is from this point that the modern English glass manufacture may be said strictly to begin. From this time forward, with the exception of the Lorraine men, then permanently settling at Stourbridge and at Newcastle-on-Tyne, and certain Italians introduced by Mansel, we hear but seldom of the presence or employment of foreigners, and not as "masters" of glass-houses, but as artisans, few in number, and working under special circumstances with English patentees who understood the science and business in all its branches. Italian influence reappeared, indeed, after the middle of the seventeenth century in England, but under totally different conditions.

[1] See Appendix, Original Documents, No. XIX.

CHAPTER VIII.

SIR ROBERT MANSEL SOLE PATENTEE FOR GLASS-MAKING—HIS PROCEEDINGS—FOUNDATION OF THE MODERN SYSTEM—REGULATION OF HIS INTERESTS—JAMES HOWELL—ANTONIO MIOTTI—MIRRORS—GLASS-MAKING IN SCOTLAND—RENEWAL OF PATENT TO MANSEL—ITS SWEEPING CHARACTER—REASONS AGAINST IT—DEFENCE OF IT—MOTIVES AND REASONS FOR ITS MAINTENANCE—ANSWER OF MANSEL'S OPPONENTS—HIS DIFFICULTIES AND LOSSES—HIS LIFE, CHARACTER, AND DEATH—PETITIONS FOR GLASS LICENSES.

THE new glass company worked together under the Patent of 1615 for two years, when Mansel bought out his eight co-partners for £1800 a year, besides undertaking the payment of the rent of £1000 a year to the Crown.[1] The prominent appearance of Vice-Admiral Sir Robert Mansel, Treasurer of the Navy, in sole control of the glass business in England, was a notable event. He was a man of vigorous character and active business habits, and there can be no doubt that it is mainly to him that is due the success of the glass manufacture, as it was carried on in England with the newly-devised furnaces, during the first half of the seventeenth century, when the foundation of the modern system was laid.[2] But he was a monopolist.

He appears to have controlled glass-works in London and elsewhere as early as in 1606, and to have made himself thoroughly conversant with the art. Soon after becoming sole lessee of the Patent of 1615 he set up furnaces, as has already been shown, successively but not successfully in London, Broad Street, the Isle of Purbeck, Milford Haven, and on the Trent, but finally succeeded at Newcastle-on-Tyne[3] about the middle of 1617.

It is beyond question that there were in England up to the end of the first

[1] See Appendix, Original Documents, Nos. XVI., XVIII.

[2] The eight patentees assigned their interest to Mansel on account of the great charges and non-success; similarly Bungard failed in his endeavours under the new system. Mansel fortunately had capital, and he patriotically took up the matter at a conjuncture when the continuance of glass-making in England was "in hazard."—See "Defence of Sir R. Mansel's Patent," Original Documents, No. XX.

[3] See Appendix, Original Documents, No. XX.

decade of the seventeenth century a number of small glass-houses after the Roman fashion—Paul Hentzner refers to them in his *Travels in England* in 1598, "Vitriariae officinae permultae"[1] — scattered about the country and producing only very inferior wares, which were distributed, together with rude pottery, by hawkers licensed and unlicensed. Public opinion was fast growing against these mischievous houses, for they wasted the woods, plundered the people, and lowered the character of the art. But it was not until the "Proclamation touching Glasses," of 1615, that any decided legal resistance was made against them. This edict had the salutary effect of closing many such furnaces, and causing the removal of others from sylvan districts to the neighbourhood of coal-fields, though, doubtless, in more remote parts the old system of wood furnaces lingered on and overlapped the new—Royal Proclamations *quand même*. It was naturally to this feature of the glass business that Mansel first addressed himself. For instance, before 1618, he procured the imprisonment of Paul Vinion, apparently a Fleming, and Peter Comley, for heating their furnaces with wood contrary to the Proclamation. In May 1618 he applied to the Council for the release of these worthies on bond not to repeat the offence.[2] It was politic to be magnanimous, and necessary for him to protect the large interests which had been committed to his charge. To this latter end he petitioned the Council, December 1618, for Letters of Assistance for the pulling down of all glass-furnaces set up as it seems without his license, and for apprehending all persons infringing his Patent for the sole making of glass, otherwise he would be unable to pay the £1000 a year to the King, and the £1800 to the other late patentees.[3] It must be taken for granted that this request was not complied with in its fulness. But it is probable that Mansel had power granted him to destroy some glass-houses, as he certainly had authority to grant licenses to others,[4] such as those at Stourbridge — where there is no evidence of any glass-house directed by him—and to some of the Newcastle houses, not making glass under the Admiral's own management. No other system could have enabled him to hold his ground for the length of time he did in the face of persistent and often virulent opposition. Monopolies may or may not be desirable according to circumstances, and the sense, good or otherwise, of the men into whose charge they are placed. In Mansel's case the concession which focussed and concentrated an important industry, at a critical moment,

[1] Hentzner's *Travels*, ut sup., p. 87.
[2] Appendix, Original Documents, No. XVII.
[3] *Ibid.*, No. XVI.
[4] See *Ibid.*, No. XIX.

in his capable hands, and saved it from decay among mere lawless artisans, working "of their Occupacion," or utter annihilation, was assuredly a wise and statesmanlike step.

In January 1619 Mansel petitioned the King that Paul Vinion should not be suffered to make green drinking-glasses to the prejudice of his Patent for the sole manufacture of glasses.[1] The mention of these sounds like a desire to introduce German or Low Country green glass roemers. Fifty years later, as we shall duly see, roemers were actually made in white glass in Venice to the orders of London glass-sellers. In 1620 Mansel resisted, under the shelter of his Patent, a proposed grant to Sir Ralph and Dame Ann Bingley for the manufacture of looking-glasses,[2] a branch of the glass business in which he said he had been at great charge in perfecting.[3] This was a case as to which it might fairly be said that a sweeping monopoly showed itself to be decidedly "hurtfull and preiüdiciall to the common weale," and because the making of mirrors and their frames implied a distinct manipulation and trade, and quite a different class of artisans from those employed in the fashioning of drinking-glasses, the most important part of Mansel's work; in fact, the Venetians marked their recognition of the distinction in 1564, when they separated the mirror-makers, the "specchiai," from other glass-makers, and erected them into a distinct company.[4] Mansel's statement, however, points to the beginning of the manufacture of a clear crystal or "flint" glass.

Mansel employed as steward or travelling manager of the Broad Street glass-works, which were situated in a part of Winchester House, in Southwark—a spacious mansion where also lived the Spanish ambassador, and now Pinner's Hall—the well-known James Howell, author of the *Epistolae Ho-Elianae* the *Familiar Letters* of an accomplished citizen of the world. They are extremely interesting from the insight they give into one phase of the conduct of Mansel's business. It appears that Howell was on the Continent from 1618 to 1621, and visited Holland, Flanders, France, Spain, and Italy. His second letter, dated "1st March 1618, Broad St.," explains his affairs to his father:—

> The main of my employment is from that gallant Knight, Sir Robert Mansell, who, with my Lord of Pembrook, and divers others of the prime Lords of the Court have got the sole Patent of making all sorts of Glass with pit-cole onely, to save those huge proportions of Wood which were consumed formerly in the Glasse-Furnaces; And this Business being of that nature, that the Workmen are to be had from Italy, and the chief Materials from Spain,

[1] *State Papers*, Domestic, Jan. 10, 1619.
[2] *Ibid.*, 1620.
[3] See Appendix, Original Documents, No. XX.
[4] Introd., *S. K. Cat.*, p. c.

France, and other Forren Countries, there is need of an Agent abroad for this use; (and better than I have offered their service in this kind) so that I believe I shall have Employments in all these countreys, before I return.

Had I continued still Steward of the Glasse-house in Broad-Street where Captain Francis Bacon hath succeeded me, I should in a short time have melted away to nothing, amongst those hot Venetians, finding myself too green for such a Charge; therefore it hath pleased God to dispose of me now to a Condition more sutable to my yeers, and that will, I hope, prove more advantagious to my future Fortunes.[1]

In a list of foreigners in England in 1618 Mr. Durrant Cooper gives the names of four Venetians, glass-makers, in Broad Street, no doubt working for Mansel.

After his short stay in Broad Street, Howell was succeeded by Captain Bacon, the secretary who subsequently absconded to France, and to whom he wrote, 6th June 1619, from Middelburg:—

. . . by Sig[r] Antonio Miotti who was Master of a Crystall-glasse-Furnace here a long time, and as I have it by good intelligence, he is one of the ablest, and most knowing men, for the guidance of a Glasse-Work in Christendom; Therefore according to my Instructions, I send him over, and hope to have done Sir Robert good service thereby.[2]

From Alicante he writes, 27th March 1621, to Christopher Jones, Esq.—

I am now, (thanks be to God) come to Alicant, the chief Rendevouz I aym'd at in Spain; for I am to send hence a commodity call'd Barillia to Sir Robert Mansell, for making of Crystall-Glasse, and I have treated with Signor Andriotti a Genoa Marchant for a good round parcell of it, to the value of 2000 pound, by letters of credit from Master Richant, and upon his credit, I might have taken many thousand pounds more, he is so well known in the Kingdom of Valentia. This Barillia is a strange kind of Vegetable, and it grows no wher upon the surface of the Earth, in that perfection, as here: The Venetians have it hence, and it is a commodity wherby this Maritim Town doth partly subsist, for it is an ingredient that goes to

[1] *Familiar Letters*, p. 2, 2nd edit. 1650.

[2] *Ibid.*, p. 19. The name of Miotti is a famous one at Murano. One of the family is said to have re-created the manufacture of glass pearls. According to Lazari—"Notizia delle opere d' arte e d' antichità della racolta Correr, Venezia, 1859"—they are first mentioned at Venice in 1318, in which year the pearl-makers were regulated by a special statute. One branch of the art is said to have been perfected by Andrea Vidaore in 1528; but there is no documentary proof of it. Another Miotti invented avanturine glass in the beginning of the seventeenth century, and many of the name are inscribed in the Libro d'oro. The glass-houses in Holland and Zeelande had ever been thorns in the flesh of the glass-makers of Antwerp, because they attracted the workmen from that city, and the drawing away by Howell of Antonio Miotti from Middelburg to England was not the first instance of such further seduction. But the Italian glass-master only remained here until 1623, when he departed and obtained leave to establish the first Italian glass-house at Brussels, as to which he had strong aspirations, and to compete with the furnace of Gridolphi at Antwerp. He stayed here but a short time, and, between 1623 and 1629, established a Venetian glass-house at Namur; but he could only obtain the assistance of a runaway Venetian, Vicenzio Luna, from Antwerp, who was pursued and taken back. During these troubles Miotti died, and his widow, Cornelia, married a native named Van Horen. The Miotti episode is a good example of the restless habits of the Italian glass-makers in the Low Countries.—See H. Schuermans, Lettre V., p. 185; and Lettre IX., p. 523; see also Introductory Notices, p. 39.

the making of the best Castile-Soap: It grows thus, 'tis a round thick Earthy shrub that bears Berries like Barbaries, but twixt blew and green, it lies close to the ground, and when it is ripe, they dig it up by the roots, and put it together in Cocks, wher they leave it dry many days like Hey, then they make a Pit of a fadom deep in the Earth, and with an Instrument like one of our Prongs, they take the Tuffs and put fire to them, and when the flame comes to the Berries they melt, and dissolve into an Azure Liquor, and fall down into the Pit till it be full, then they dam it up, and som days after they open it, and find this Barillia-juyce turn'd to a Blew stone, so hard, that it is scarce Malleable, it is sold at on hundred Crowns a Tun, but I had it for lesse; ther is also a spurious Flower called Gazull that grows here, but the Glasse that's made of that is not so resplendent and cleer.[1]

Writing from Venice, 30th May 1621, to Sir Robert Mansel, Howell says:—

The two Italians who are the Bearers hereof, by report here, are the best Gentlemen-Workmen that ever blew Crystall, one is allied to Antonio Miotti, the other is cousin to Mazalao. . . . I was, since I came hither, in Murano, a little Island, about the distance of Lambeth from London, wher Crystall-Glasse is made, and 'tis a rare sight to see a whole Street, where on the one side ther are twenty Furnaces together at work; they say here, that although one should transplant a Glasse-Furnace, from Murano to Venice herself, or to any of the little assembly of Islands about her, or to any other part of the Earth besides, and use the same Materials, the same Workmen, the same Fuell, the self same Ingredients evry way, yet they cannot make Crystall-Glasse in that perfection, for beauty and lustre, as in Murano; some impute it to the qualitie of the circumambient Ayr that hangs ore the place, which is purified and attenuated by the concurrence of so many fires that are in those Furnaces, day and night perpetually, for they are like the Vestall fire which never goes out.[2]

The independent testimony here given with regard to Venetians sent over to assist Mansel is valuable as showing the honest endeavours he made to improve the glass manufacture in England, apart from his own declarations already spoken of.

Writing from Venice to his brother, 1st June 1621, Howell says:—

Since I came to this Town I dispatch'd sundry businesses of good value for Sir Robert Mansell, which I hope will give content: The art of Glasse-making here is very highly valued, for whosoever be of that profession are Gentlemen ipso facto, and it is not without reason, it being a rare kind of knowledg and chymistry to transmute Dust and Sand (for they are the onely main Ingredients) to such a diaphanous pellucid dainty body as you see a Crystal-Glasse is, which hath this property above Gold or Silver or any other minerall, to admit no poyson; as also, that it never wastes or loseth a whit of its first weight though you use it never so long.[3]

Howell here quotes a Venetian saying, "that the first handsom woman that ever was made, was made of Venice-Glasse, which implies Beuty, but brittenes withal," and this leads him to the jingling euphemism of "Lasses and Glasses," used here perhaps for the first time in English literature, just as Sheridan employed it in *The School for Scandal* long after. The particular notice that Howell takes of the special properties of crystal glass with regard to poison, and

[1] *Familiar Letters*, ut sup., p. 40. [2] *Ibid.* p. 45. [3] *Ibid.* p. 47.

wearing, indicates to how small an extent the use of glass vessels of the higher quality—"diaphanous, pellucid, dainty"—had penetrated at that time in the community; otherwise such remarks to a person in his brother's position would not have been at all to the purpose.

In a letter misdated 1618, but really written in 1621, Howell tells Dr. Mansel—

> . . . Your honourable uncle, Sir Robert Mansel, who is now in the Mediterranean, hath been very noble to me, and I shall ever acknowledg a good part of my education from him. He hath melted vast sums of money in the glass busines,[1] a busines indeed more proper for a Merchant than a Courtier. I heard the King should say, that he wondered Robin Mansell, being a Sea-man, wherby he hath got so much honour, should fall from Water to tamper with Fire, which are two contrary Elements. My Father fears that this glass employment will be too brittle a foundation for me to build a Fortune upon; and Sir Robert being now, at my coming back, so far at Sea, and his return uncertain, my Father hath advised me to hearken after some other condition.[2]

Pepys tells us, 24th September 1660, that the Broad Street glass-house was then a dancing-school.

It is certain that between 28th July 1610, when the License for coal furnaces was granted to Slingsby, and May 1618, when Mansel petitioned the Council respecting an infringement of the Patent of 1615, from which he had bought out his eight co-partners, the use of closed or domed pots had been introduced—first, in all probability, by Percivall—and improved upon in consequence of the practical experience of them by Mansel.

Of the progressive development of mirrors, since Eve looked into "the wat'ry gleam" and Egyptian and classic beauties beheld themselves—perhaps somewhat distortedly—in mirrors of metal and obsidian, this is not the moment to say more than a very few words, passing over the Steele Glasses, which are touched upon in another place.[3] But it may be proper to recall that, according to Lazari,[4] it was not until the fourteenth century that glass mirrors with metallic sheets at the back were first conceived by the Venetians.[5] Their reception was not encouraging: common sense does not always go hand in hand with fashion, and the polished metal mirrors held their ground until the end of the fifteenth century. In 1507 the so-called secret of making crystalline mirrors was introduced into Venice from Germany and Flanders by two

[1] See Appendix, Original Documents, Nos. XVI. and XXI.

[2] *Familiar Letters*, ut sup., Sec. 2, p. 5.

[3] Appendix, Inventory, No. VII.

[4] "Notizia delle opere d'arte e d'antichità della racolta Correr."—A. Sauzay, *Marvels*, etc., p. 66.

[5] It is certain that glass mirrors were used in the middle of the thirteenth century, as appears in the writings of Vincent of Beauvais, and other authors. Mirrors of crystal are not unfrequently mentioned; they were also made of jasper, and gold and silver were likewise used as the reflecting medium. Piers Gaveston had an enamelled silver mirror.—See *Archæological Journal*, vol. xviii. p. 135.

Venetians, and the art was carried on in Murano from that time with conspicuous success, and until long after the great epoch. Mirror-making was not established in France until the latter part of the sixteenth century, and was, no doubt, introduced into England by the Italians on their first arrival here in the time of Edward VI. The "table" glass made in England in 1567 by Lorraine and Normandy men, under the Patent to Carré and Becku, may have included plates fit for looking-glasses of an inferior kind. But Mansel, in his "Defence" of 1624, claims to have first made them here.[1]

By the vigilance of Mansel's agents, Peter Horegill and John Greene had been committed to the prison attached to the Marshalsea Court, for importing foreign glass under the pretext of its being for the King's service,[2] contrary to the Proclamation of 1615. They petitioned for release, 4th February 1620. Greene was perhaps the father of John Greene, of whom we shall hear something further on. In the same year the Glaziers' Company protested that Mansel's glass was bad, scarce, brittle, and thin in the middle.[3] The great Inigo Jones, as Surveyor of Works, testifies to these points, doubtless from his use of the glass in the Banqueting House at Whitehall in this very year. It must have been cylinder-made glass, blown too thin, to save the metal, before it was opened out, and not trundled or twirled sheets, which gave a "bull's-eye" in the middle, necessarily the thickest part. The illustrious architect also said that Mansel's glass was not so good as in ancient times.

The petition of Ralph Colborne, hour-glass maker, to the Commissioners for Glass, 12th March 1620, points to an objectionable feature in a monopoly, for he says he is oppressed by Mansel, who constrains him to buy his glasses in London, both bad and high-priced. He desires to buy them at any of his works;[4] these would include glass-houses working under licenses from Mansel. In such an instance as this the word *monopolist* was properly applied in an invidious sense, because Colborne was restrained in his freedom or liberty to buy what he wanted in the market which appeared to him to be the best. It was at this time that Sir Robert was suffering under the machinations of Bongar, who caused the withdrawal of Scotch coal from his London works.

This was immediately after the Proclamation of 25th February 1620, which again prohibited the importation of foreign glass, and confined the permission to import glass given to the patentees before their works were completed, to glasses of rare and curious sorts, and forbidding the erection of glass-works

[1] See Appendix, Original Documents, No. XX.
[2] *State Papers*, Domestic, 1620.
[3] *Ibid.*, March 1620.
[4] *Ibid.*, March 12, 1620.

by any but the patentees. So Mansel's petition of 10th December 1618, as to pulling down glass-houses, had been sufficiently complied with. The rare and curious glasses, "verres façon de Venise," would have been mostly imported from the Low Countries, but some, as we know, came direct from Venice in "cupboards,"[1] just as choice cigars are imported at the present day from Havana in cedar cabinets. The time had long passed for the introduction of glasses "à la façon de Damas."

On 18th June 1620 the Council informed the officers of Customs that no glass, save glass made in Scotland, was to be imported to the infringement of Mansel's Patent, then under consideration, but respited until his return from sea service.[2]

The first mention of glass-making beyond the Borders[3] is that in 1610 James I. granted to Lord George Hay a Patent for the exclusive right of making glass at Wemyss, in Fife, for thirty-one years. It is very doubtful, considering the rude and backward state of Caledonia, that any glass was made there before the use of coal was well introduced in glass-furnaces. In 1627 Hay transferred his monopoly to Thomas Robinson, a merchant tailor of London, who sold it to Mansel for £250 a year. Thus it was not only a good property but a desirable acquisition for Mansel, because his foreign glass-makers — Giovanni dell' Acqua, whom he had brought from Venice before 1618, Bernard Tamerlayne, and other artisans—upon discord being stirred up about wages, had been drawn away to the Scotch works;[4] that difficulty would now be cleared away. To replace the runagates who could not be relied upon after their return to London from Scotland, Mansel had to procure a company of glass-makers from Mantua, and it is recorded in the "Costs," etc., presented to the King, that the Mantua men effected "the bettering of the condicõn of his glasse," which result, fifteen years before, he could not bring about through the Venetians.[5]

On 4th April 1621 the Glaziers' Company certified to the Council that Mansel's glass was cheap, of good quality, and plentiful, and superior to the

[1] See Appendix, Inventory, No. VII.

[2] *State Papers*, June 18, 1620.

[3] In a piece of late sixteenth-century tapestry at Arniston is a medallion in which St. Paul is shown offering wine in a "façon de Venise" glass to Timothy, surrounded by the legend: "Paul saying to Temothe tak a lytl vyn to comfort stomort."

[4] *State Papers*, June 20, 1621.

[5] See Appendix, Original Documents, No. XXI. It is noteworthy that the improvement in Mansel's glass was brought about at that time by Mantua men, and not by Venetians. Mr. Evelyn, in his *Diary*, July-August 1645, being then at Venice, says that the Murano glass was made from white flints from Pavia, pounded and sifted very small, mixed with the ashes of a sea-weed from Syria, and a white sand.

glass brought out of Scotland; so improvement had been rapid. They also showed that they were better served now than when Bongar and others used to buy up all the glass and sell it at high prices.[1] This latter action was, in truth, the most striking and grievous kind of monopoly, in the common acceptation of a term which was not properly employed save in connection with a royal grant.

On 15th April the same Company petitioned the Commissioners for the glass business against the proceedings of Isaac Bongar, John Dynes, and others in endeavouring to engross the whole trade in glass. Entreaty was made that their "slanderous bill in Parliament against Mansel's patent be frustrated," or the Company must suffer under these men or be subject to the Scotch Patent.[2] On the other hand, and at the same time, John Worrall and other glass-makers, who learned the art under Sir Jerome Bowes, set forth by petition that in consequence of Mansel's Patent they are prevented from pursuing their calling; they pray for a License, for which they would pay £1000 a year to the Crown. Bongar, with others, also petitioned for the calling in of Mansel's Patent, which, they said, had been pronounced a monopoly by two Parliaments. They would offer £1500 a year to the Crown for a License, and would make glass 2s. a pound cheaper than Mansel.[3] In the "Answer" to Mansel's "Defence" or "Breviat," printed at the end of the "Reasons against Mansel's patent 16 April 1624," these petitioners declare that they desired no Patent, but were willing to pay the sums offered for liberty of pursuing their trade.[4]

The Patent granted 19th January 1615, from which Mansel had bought out his co-partners, having been complained of as a grievance in the one-year Parliament of 1621, was declared prejudicial and hurtful, and to have become void. But in consideration of Mansel's faithful service, the expenditure of his whole fortune, and the success of his labours in glass-making with sea coal and pit coal, the Patent was, on his petition, renewed to him alone, without rent, for fifteen years, 22nd May 1623,[5] for the making of all kinds of glasses and glass whatsoever, the importation of foreign glass being left unrestrained. All other glass-furnaces were prohibited, save by Mansel's license, to whom the usual powers of search were also granted, as well as for the demolition of all furnaces contrary to the terms of the Patent. This is a most important document, and from its re-citement of former glass Patents granted since 1607, throws much light upon the complicated history of this period of the industry.

[1] *State Papers*, Domestic, April 4, 1621.
[2] *Ibid.*, April 4-15, 1621.
[3] See Appendix, Original Documents, No. XIX.
[4] *Ibid.*
[5] *Ibid.*, No. XVIII.

In consequence of Bongar's hostile attitude under what was to him the galling dominance of a monopoly, he had been committed to prison. Dame Mansel was willing to procure his liberation on his promising not to infringe Sir Robert Mansel's Patent, or disturb his glass-works. He had sent a kind of apology for his expressions against Mansel, but feared to bind himself to pledges which might afterwards be strained to his inconvenience.[1]

Four documents now claim special attention. They have already been alluded to or made use of for details, and they are particularly valuable from the information which they supply upon the subject in hand at an important period of its history. And while they are corroborated by the evidence of other public records they are not the less interesting from the added zest which they present of the question being elucidated from opposite points of view, and from the reiteration of former statements.

I. The "Reasons against Sir R. Mansel's Patent, 16 Apr. 1624,"[2] proposed to the House of Commons, set forth that such Patent granted to him for the sole making and melting of all manner of glass with sea coal, pit coal, and Scotch coal, and the restraining of all others but such as are licensed by him to make glass, should be void. Both in the Parliament of 12 and 19 James I. (1614 and 1621) Patents granted to others for the sole making of glass were adjudged monopolies and grievances, and the invention was practised in several places before the patentees appropriated it and deceived the King. The evils arising from one man having sole control with arbitrary prices, the restraint to "artists" and poor glass-makers, and the injustice to the subjects in being prevented from buying in the market that seemed to them the best, are pointed out; also the unskilfulness and incapacity of Mansel, and the hardship of the prohibition of wood to glass-makers, who only burnt the lops of trees, while the iron men—the greater consumers of wood—were allowed to carry on their work. The search writs granted to Mansel for offenders against the Patent, their imprisonment at his will, and the starvation and beggary of their children is touched upon, and an exaggerated and dismal picture drawn of the continued discouragement and hardships of the apprentices, through the gradual decay of the industry and the malpractices of Mansel under the Patent for the pretended new invention, by which the whole kingdom is tied to one market with increased prices. It is wrongly stated that Verzelini's Patent "continued almost fifty years"; his term was for twenty-one years, and the Patent was re-granted to Bowes for twelve years only.

[1] *State Papers*, Domestic, 1621. [2] Appendix, Original Documents, No. XIX.

II. The "Defence of Sir R. Mansel's Patent, November, 1624"[1] against the petition of Bongar, Worrall, and others shows that in consequence of the wasting of wood the King granted the sole and only making of glass with pit coal and sea coal to certain patentees, at whose charge Scotch coal was also brought into use, for the term of twenty-one years at a rent of £1000. They grew weary of the charge and assigned their interests to Mansel. Bongar attempted the new manufacture, but gave it up on account of the expense. Mansel, finding it to be in jeopardy, undertook its perfecting, and after setting up glass-houses in several places without success, finally prospered at Newcastle-on-Tyne, using local coal. His difficulty was to get clay for the pots nearer than Staffordshire, whence it was brought, until some of the petitioners caused its corruption, with the result that the pots broke. He then sent for clay beyond Rouen in France, which was also spoilt, in all probability by the procurement of Bongar through his kinsmen there. Mansel was then driven to seek and send for clay from Spa in Germany, of which the petitioners caused the ruin of an entire ship-load. Finally clay was found in Northumberland, and thus Mansel was saved from absolute ruin. But Bongar, besides refusing the good appointment of Mansel's overseer, endeavoured openly to bribe the workmen at the Newcastle furnaces, and so persecuted him that his glass suffered in quantity and quality. He was therefore obliged to send for expert strangers from abroad in order to save the business. Mansel goes on to say that, with the view of the absolute perfecting of all kinds of glass in England, these strangers not only themselves made "all sorts and kinds of right Christalline Morana-glasses," "never made or attempted here before," but instructed the English workmen in these arts. Some of the petitioners, having set on foot a Patent for Scotland, in deadly rivalry to Mansel, combined to raise the prices of his Scotch coal-shippers, to ruin his "Christall and white glasse" works in London. This design was frustrated by the good sense of Dame Mansel, who insisted upon the use of Newcastle coal, with conspicuous success. It is shown that during Mansel's absence at sea in 1621 his Patent was declared a grievance in Parliament because the barring of importations discountenanced navigation and enabled him to sell the sorts of glass he liked at his own rates, although Dame Mansel petitioned that her husband's absence on State sea-service prevented his reasons as to the upholding of the Patent being properly presented and considered. The privilege was therefore continued by the King, 10th July 1621, until Mansel's return. It is pointed out that in July 1621 the King issued a Proclamation concerning many

[1] Appendix, Original Documents, No. XX.

public grievances complained of in Parliament, but ignored those touching glass.[1] In October Mansel petitioned the King, stating that he had brought the glass business to perfection at the cost of his whole fortune, and prayed for a new Patent and that he might be freed from the rent of £1000 a year. The question, the "Defence" states, the King referred to a committee of the Council, for examination and report, and this distinguished body put several propositions to Mansel which elicited answers concerning his great losses during the perfecting of the business, and in consequence of the Scotch Patent. Mansel also showed that he was maliciously attacked by Bongar and Worrall in order to obtain Patents, the one for green glass and window-glass, and the other for all other kinds of glass, offering rents of £500 and £1000 a year respectively. The lords of the Committee reported that they advised not to uphold the Patent, but thought fit that a new one should be granted without rent, and importations left free. To this the Council in general agreed. It is further set forth that, acting upon the report, and in respect of Mansel's merits and great disbursements, his perfecting of the work, the goodness and reasonable prices of the glasses, as certified by the buyers and users of all kinds, so that just occasion of grievance was taken away,—the King declared void the Patent of 19th January 1615, and renewed to Mansel, 22nd May 1623, a Patent for fifteen years without rent for the sole manufacture of glass of all kinds, leaving importations open.

III. "The Motives and Reasons"[2] for the maintenance of the Patent—a document which has already been made use of—are shown in an *addendum* to the "Defence." They are conceived in the interests of Mansel, and furnish much valuable information with respect to the mischief arising from the destruction of woods in Warwickshire, Hampshire, and Wiltshire, and with regard to the efforts and expenses, and the general commercial results of his direction of the industry. The document was presented by Mansel to the House of Commons for ratification, and to clear himself from the imputations cast upon him by the petitioners.

IV. Nevertheless, Bongar and his friends returned to the charge in "The Answer,"[3] contained at the end of the "Reasons," to Mansel's "Defence" or Breviat. Now the free importations gave offence and were said to be adverse to the poor glass-makers; moreover, as to imports, they were still under the

[1] In the course of a speech by the King to the Lords in the Banqueting House, 9th April 1614, four days after the opening of his second parliament, he thus alludes to proclamations: "As touching Proclamations, so did I never intend them to have the force of Laws, but to prevent misgrief arising, wherein the Law hath no Provision, until a Parliament can provide."—*Parliaments and Councils of England*, p. 263, edit. 1839.

[2] See Appendix, Original Documents, No. XX.

[3] *Ibid.*, No. XIX.

warrants of Mansel. It is set forth that Bongar and Worrall did not desire a Patent, but only leave to freely pursue their calling, for which liberty they would jointly pay £1000 a year. Bongar naturally objects to Mansel's account of his malpractices, and casts the same in his teeth, and the surprising assertion is made that Bongar's ancestors were "the men who brought the trade of window-Glasse into England, which had beene lost many yeares before." The rest of the document is taken up by extravagant and categorical denials of all Mansel's statements, upon which the Council had thought fit to advise the King to grant him a new Patent, 22nd May 1623. This was treading upon dangerous ground. Sixty-four reasons were presented to Parliament against the Patent, and on 8th December 1626 the King, having referred to the Council Bongar's complaint against the glass Patent, it is ordered that the same shall stand. "Their Lordships think it to be of dangerous consequence, and far trenching on the prerogative, that Patents granted on just grounds and of long continuance should be referred to the strait trial of the common law, wherefore they order that all proceedings at law be stayed, and that Bongar do not presume further to trouble his Majesty on pain of punishment."[1] Thus Mansel's Patent was exempted from the operation of the Act of Parliament of 21 James I. c. 3 (1624) against monopolies, and he had a period of peace.

Mention has been made of the "teaching" of Englishmen in glass-making after the Venetian and French manners in the last quarter of the sixteenth century. It remains only to add at this point that Bongar's statement about his ancestors could have been nothing but an exaggeration of the fact of some of his family having come over to work at window-glass making in Sussex under Carré and Becku in 1567. Nothing is more improbable than that between 1531—to allude only to the date of the completing of the windows of the Chapel of King's[2]—and 1567, the art of window-glass making in England should have completely faded away. The thing is, in fact, impossible, and Isaac Bongar was assuredly a vindictive, untruthful, and unscrupulous knave.

On 28th January 163$\frac{4}{5}$ Mansel again addressed a statement to the Council touching the costs, charges, difficulties, and losses sustained by him in the glass business.[3] He recapitulated much that is contained in his "Defence" of 1624, and explained in detail how he came to be out of purse about £30,000 before the manufacture could be perfected. He alluded to his troubles in connection with workmen, both native and foreign, ill-affected to the Patent,

[1] *State Papers*, Domestic, Dec. 8, 1626. [2] See p. 160.

[3] Appendix, Original Documents, No. XXI.

who wasted his materials and broke the pots and then received "dead pay" for many months together. There were heavy charges in prosecuting Sir William Clavell, Bongar, Worrall, and others who set up glass-works in contempt of the Proclamation and in opposition to the Patent. Before he could reap any benefit from the new Patent for fifteen years, of 22nd May 1623, he had the trouble of his workmen in connection with the Scotch Patent, which he had to buy at £250 a year. Then he had to fetch a company from Mantua, and Bacon, his clerk—the blaspheming captain to whom Howell wrote his lofty remonstrance in 1628—absconded to France with his accounts and money, and procured the setting up of works there, whence came "the greatest part of drinking-glasses here spent," until the importation was stopped "upon solempne debate" at the Council table, 25th June 1632. Notwithstanding, up to this time, Mansel said that he had neither reaped profit nor enjoyed peace. He had continued his labours and had not raised the prices, and as to the looking-glass business, it was not until the Venetians inhibited the exportation of unwrought plates that this manufacture became settled and prospered as it did. But at the very time of this his humble petition, submitted with his life and fortunes at his Majesty's feet, and when he had received signification of his pleasure for a new Patent for twenty-one years, his men were again drawn into Scotland—as it seems to rival works—and attempts are made to produce glass in Ireland. It is a sad story of struggles and losses; truly, the lines of a monopolist were not fallen unto him in pleasant places!

The Patent to Mansel, granted 22nd May 1623, was to expire in 1638. It does not appear that Charles I. renewed it at once—he had other things to think about—but a Proclamation had been issued, 14th October 1635,[1] prohibiting the importation of all kinds of glass during the continuance of Mansel's privilege, who was allowed to import glass from Moravia, etc., perhaps the earliest instance of such importations to England from the neighbourhood of a great and ancient German glass-making country, whose productions eighty years later flooded the markets of the Low Countries, and completed the annihilation of the ancient artistic glass "façon de Venise" which English "Flint Glass" had first shaken.[2]

Also in 1635 Captain Thomese Francke, probably from the Low Countries, and of the numerous artistic family of the name, took out a Patent for alterations in the forms of furnaces and kilns. They are represented as effecting great saving of fuel.

On 15th December 1637 petitions were presented to the Council by certain

[1] *State Papers*, Domestic, Oct. 14, 1635.

[2] See Introductory Notices, p. 41.

hour-glass makers, and on 12th January 163⅔ by the Glaziers' Company, against the badness and dearness of the glass produced by Mansel and his contractors. These, upon Sir Robert's "reasonable answers," were pronounced "clamourous and causeless," and the petitioners were ordered, in the usual despotic and candid way, not to trouble the Council any further, under pain of imprisonment.[1]

Questions arose in 1639 concerning demands of men employed in the saltpetre works who had petitioned the Lords. It is incidentally recorded in Mansel's justification that he had the management of his Majesty's glass-works by a commission under the Broad Seal of England. Where they were situated is not indicated, but they were most likely at Lambeth. A curious document is added respecting the prices of materials and of drinking-glasses of all sorts.[2]

In 1640, when the Scots lay before Newcastle, the workmen fled, and the three glass-furnaces were stopped. The enemy prevented the export of coal, so that the London works were stayed also, and 12,000 cases of glass ready to be shipped south could not be sent.

On 13th May 1641 Mansel petitioned the Lords, stating that he had a grant from the King for the sole making of glass, and for preventing the importation thereof, for which he paid £1000 a year; of late some persons had dared, under colour of a complaint to Parliament, to import glass. He prayed for protection of his rights, and for punishment of the offenders, and an order was granted accordingly. On 21st July Mansel presented another petition, setting forth that, in spite of the order of 13th May, Richard Batson and others had imported large quantities of glass, in particular 129 chests on 12th May, had violently resisted those who would enforce the order of the House, and entered legal action against the petitioner. On 30th July Batson answered the petitioner, stating that the Glaziers' Company had approached the Commons as to the matter between him and Mansel, which had been referred to the Grand Committee for Grievances. The consequence was that Batson had been attached in the wonted arbitrary fashion, and still remained in custody without a hearing. He prayed that his case may be referred back, and that he may have his goods on paying the Custom dues.[3]

In the same year Jeremy Bago, who married Suzanna Henzey at Oldswinford in 1619, and had a glass-house at Greenwich in partnership with Francis Bristow, was served with an order of the House of Lords at the instance of Mansel. "But they continued making glass in contempt of the order." Mansel

[1] *State Papers*, Domestic, 1637-38.

[2] Appendix, Original Documents, Nos. XXII. and XXIII.; *State Papers*, Domestic, April 30, 1639.

[3] H. S. Grazebrook, *ut sup.*, p. 10.

lived at Greenwich, and in the following year these worthies complained to the Lords of the grievous wrongs and insults they had suffered at his hands.[1]

In 1642, when there were doubts about the political leanings of the Earl of Northumberland and his Deputy High Admiral, and their commissions were revoked by the Crown, 28th June 1642, it was suggested that Mansel should be sent to the command of the wavering fleet. The perplexed King admitted his experience and loyalty, but thought the duty too fatiguing for so aged a man. He was then about seventy. The result was that the English navy passed into the hands of the Parliament.[2]

Having spoken only of Mansel in his relation to glass-making, it will be proper to say something about himself and the public career of this distinguished servant of the State. Sir Robert Mansel, "the proud Welshman," was born about 1573, the fourth son of Sir Edward Mansel of Margam, Chamberlain of Chester, and Lady Jane Somerset, and grandson of Sir Rice Mansel, a notable soldier in the time of Henry VIII., grantee of Margam Abbey, and Chamberlain of the county palatine of Chester. He adopted the naval profession, and serving with distinction at the siege of Cadiz in 1596, under Lord Howard of Effingham and the Earl of Essex, was knighted in that year by Elizabeth. Occupied much during the whole of his career in the Narrow Seas, he was named Admiral of them as early as in 1601, or 1602, and Vice-Admiral of the Fleet. In 1620 Mansel commanded a naval expedition to Spain and Algiers. He sat in Parliament for many years, successively as member for King's Lynn and Carmarthen county. In 1619 he was a canopy bearer at the Queen's funeral in the Abbey, and carried the banner of Darnley impaling Scotland at the obsequies of King James in the same church in 1625. These honours, particularly the latter, are signal proofs of the esteem in which he was held by James and Charles. Mansel's last public appearance seems to have been in 1652, and he is stated, but not with precision, to have been dead on 12th August of the following year.[3] There is some confusion—no novelty in a Welsh pedigree—as to his second and third wives; but it is certain that he first married, on 15th March 1617, Elizabeth Roper, a maid of honour of the Queen, and this lady particularly deserves mention here for the gallant manner in which she protected her

[1] H. S. Grazebrook, *ut sup.*, p. 52.

[2] E. B. de Fonblanque, *Annals of the House of Percy*, vol. ii. p. 444, 1887 (for private circulation only); G. T. Clark, *Some Account of Sir Robert Mansel, Knt., Vice-Admiral*, etc., and of *Sir Thomas Button, Knt.*, etc. (privately printed at Dowlais, 1883).

[3] J. Brand, *History of Newcastle-on-Tyne*, vol. i. pp. 43, 45 (1789); G. T. Clark, *Some Account*, etc., p. 53. A portrait of Mansel is in the possession of Miss Talbot of Margam.

husband's commercial interests, and successfully carried on his works during his absence in the service of the State.

We have now seen from the evidences—far indeed from copious when compared with those of the Low Countries—which have been preserved in public records or State Papers, that, from 1616 to about 1653—a period of nearly forty years—the whole of the glass business in England was controlled and guided by Sir Robert Mansel. That this was done mainly through the medium of something very like "an oppressive monopoly" may not be imputed to him for censure. That was the accident of the times in which he lived—a natural attribute of Star Chamber days, and there is assuredly nothing to show that any of his opponents would have brought anything approaching to Mansel's energy and probity to the business, or have risked the amount of capital which he did in it. Rather let it be remembered, to the honour of the vigorous vice-admiral, that the confidence which was reposed in him by the Crown, and the power that was placed in his hands, was fruitful of so much good. And it is almost certain that, but for the concentration of the practice of the science under Mansel, the glass industry would have been dribbled away in countless country places—for moderate glass-furnaces are not expensive to set up—and in small houses, for a mere livelihood, by men of no accurate knowledge of what was going on elsewhere in the world, diligence, or capital, and anything with a resemblance to science or art in their conduct postponed for at least another hundred years. Nor may the character of the men Mansel employed, such as Howell, and the qualifications of the foreigners he attracted, like the accomplished Miotti, be overlooked in estimating his prescience and the high value and imperial character of his unceasing labours. He showed, indeed, the capabilities and the commercial importance of glass-making for England such as small men—like he of Chiddingfold, working "of his Occupacion"—could not possibly have grasped, and it is to Mansel that we are indebted for the gradual "perfecting"—to use his own word—of glass-making in this country. "I am so well acquainted with every branch of it," he told the Council in 1639; and the fact of his having "perfected the work of looking-glass plates" before 1635, implies the early development of something at least very like crystal or "flint" glass which, brought to a completion later on, revolutionised the art of glass-making, and has resulted in untold benefits to the world. Nothing can deprive Mansel of the honour that he is entitled to on this score.[1]

[1] Mansel was of course pursued by ruthless and warped detractors. But it is scarcely necessary to say that the opinions of unprejudiced persons concerning the quality of his glass furnish overwhelming evidence that it steadily improved from the beginning to the end of his career. On one

The actual date of Mansel's death has not been shown with certainty, but it must have been a few years before 1660, because in November of that year Philip Howard—son of the Earl of Berkshire and a Colonel in the Guards, whose great-grandson John succeeded in 1783 as fifteenth Earl of Suffolk and eighth Earl of Berkshire—and Sir Charles Berkeley, Groom of the Stole to the Duke of York, petitioned for a Grant, with survivorship of thirteen years, of the office of making white and green glass as formerly conceded to Sir Robert Mansel.[1] In the same year Arundel, relict of Colonel John Penruddock, who was beheaded at Exeter in 1655 for taking part in an insurrection against Oliver Cromwell, petitioned for the sole license of making glasses for twenty-one years, paying £500 more rent than was ever paid before. The petition was supported by the glass-makers, who desire that the making thereof be let to farm, as it was to Mansel and others. The petitioner incidentally states she has lost £15,000 by her husband's loyalty.[2] Again, in November 1660, Charles Gifford petitioned for the incorporation of a company for glass-making, and leave to appoint officers, etc., together with the prohibition of the import of any foreign glass, of which, he says, the Italians now engross the whole trade. This point will be returned to.[3]

The death of Mansel, which produced all this renewed interest in and zeal for the glass trade in England, brings us to the end of a period during which a great and important change had been silently taking place here in the science of glass-making. This was the gradual introduction of crystal or "flint" glass, which must have had its origin in the use of close pots, brought about by the newly invented furnaces for which a Patent was first granted to Sir William Slingsby and others, 28th July 1610, for the employment of sea coal or pit coal instead of wood in the making of glass, though coal was in use at least two years earlier. The change which was thus slowly created broke up the old glass-making traditions, which linked us directly in this regard with the Renaissance and the Middle Ages.

occasion, certainly, namely, in March 1620, the Glaziers' Company were not satisfied with Mansel's window-glass because it was thin in the middle, and they were supported by Inigo Jones, who said it was not so good as in ancient times. The thinness was, however, no test of the quality, and "ancient times" is a very vague expression. In 1637 further complaints were made by the Glaziers, who on other occasions had nothing but praise to bestow, but Mansel gave "reasonable answers."

[1] *State Papers*, Domestic, 1660.

[2] *Ibid.*

[3] *Ibid.*

CHAPTER IX.

HOUSEHOLD INVENTORIES—LORD WILLIAM HOWARD—DOROTHY DAME SHIRLEY—SIR WILLIAM AND SIR THOMAS FAIRFAX—EDMUND WARING—RELATIVE POSITION OF ENGLISH DRINKING-GLASSES—THEIR GRADUAL ADVANCE IN SOCIAL LIFE—HENRY VIII.'S GLASSES—JAMES I.'S GIFTS—CHARLES I.'S PLATE AND GLASSES.

At this juncture we may appropriately return to documents of another kind, namely Household Inventories, already drawn upon,[1] the entries from which continue the illustration in a different way, up to the middle of the seventeenth century, of so much of the story of glass-making as has up to that date been derived from the State Papers; and though but slight, they are the more interesting because they refer to the time when the Italians were gradually passing away from English glass-houses, and native workmen left by degrees to their own resources. The glasses generally in use during this period were, therefore, of purely English manufacture, but leavened up to the end of the first quarter of the century by an ever-decreasing Italian influence.

It has been shown that the importation of foreign glasses was interdicted in 1615; again in 1620, for the protection of Mansel, excepting "glasses of rare and curious sorts," and a third time in 1635, the prohibition extending to glasses of all kinds made in foreign parts. From this year, then, English glass-houses supplied every requirement, but not for long, as will be duly shown.

The following extracts are from the Household Books of Lord William Howard of Naworth Castle,[2]—"Belted Will" of Border history:—

1612. "A glasse of rosewater from Carlyle," brought by a boy who was paid vjd., and among "utensiles or necessaries" three glasses vjs., and four others js., besides further glasses for js. Under the same date glasses to the amount

[1] See pp. 137, 142, 143, 145.

[2] *Surtees Society*, vol. lxviii., 1877; see Appendix, Inventories, No. VI.

of viijs. were brought by a horseman from Newcastle, and six glass plates xijd. for "My Ladye." There is every reason for believing that the use of coal in glass-furnaces was first methodically practised by Thomas Percivall, in Staffordshire, in, or possibly a year or two before, 1608. The system was apparently introduced into the North by Slingsby in 1610, and not carried on by Mansel at Newcastle before 1617, in which year he bought out Zouche and the Court Company. Lord William Howard's glasses of 1612 were either imported from the Low Countries, like Alderman Anderson's glasses in 1570, or locally made in a small wood-heated furnace suppressed by the Proclamation of 1615; but there is no evidence to show that any glass was made at Newcastle before Mansel's arrival.

In 1618 "a glasse celler" was bought for xvjs. iiijd. Glasses, and a drinking-glass were obtained in the same year for Lady William Howard, and thirteen glass plates for ijs. These were probably for fruit, March paines, suckets, or sweetmeats, and would certainly serve the purpose better than the painted and gilded wooden roundels or trenchers of late Tudor times—supposing that such delicate tablets were ever put to such a use, which is very doubtful. In the same year "Mrs. Mary," the impulsive youngest daughter of the house, born in 1604, bought glasses "at the gate"—the picturesque gate of Thomas, Lord Dacre. These would have been brought by hawkers,[1] "qui portant vitra ad dorsum;" they must have been very bad, like most things "bought at the gate," and were probably made at one of the inferior glass-houses which the Proclamation of 1615 and the general action of Mansel had the effect of closing, if he did not choose to license them.

[1] A very curious woodcut representing a German glass-house is given in *De re metallica* of the glass-master, Georg Agricola (1490-1555), printed at Bâle by Jerome, son of John Frobinius the Greek critic and friend of Erasmus (see Plate 17, p. 80, *sup.*) Here the pedlar is shown starting on his rounds, with his well-filled pack or crate—krackse—on his back, carried like a knapsack, a staff in his hand, and a sword at his side, recalling the German glass-hawkers of the thirteenth century, *see* Introductory Notices, p. 80, and p. 173. They are spoken of as "glasse carriars" in the Parish Registers of Rudgwick, Sussex, at the end of the sixteenth century.

The following notice of an English glass-pedlar is given in *The True Character of Mercurius Aulicus*, a pamphlet printed by T. Forcet, 1645: "I heard once a storie told of old Allen of Glocester-hall in Oxford, he that had the name of a famous Conjurer, which was thus. He being a walking a mile or two of Oxford with a Gentleman, met with a poore man loaden with glasses, whom he let passe by, and afterwards asked the Gent. if he would see that poore man breake his glasses. The Gent. desirous to see that sport, but somewhat loath to have the poore man undoe himselfe. Well, old Allen made use of his art, the Pedler took his staffe, and fell a thrashing upon his glasses; the Gentleman could not forbeare laughing to see how earnest the fellow was at his worke. Yet, when he had done, old Allen payd him his wages, for he ask[t] him how much his glasses cost him, and so payd him to the full and gave him something to drink besides." Thomas Allen died 30th September 1632, aged ninety.

In 1620 a great drinking-glass was bought for iijd., and other glasses brought by a horseman who, if he came from Newcastle, as in 1612, would have taken the line of Hadrian's Great Barrier from Wall's End to Lanercost, at that time, when so much more of the Roman Wall and of the Camps was remaining than at the present day, a journey of interest indeed.

In the following year a much larger number of glasses was bought, as well as two bottles to put wine in, stilling glasses and plates. The date of this increase coincides with that of the certificate of the Glaziers' Company as to the good quality and abundance of Mansel's glass. The works at Newcastle must at this period have been in the flourishing state, to which Mansel testified in 1624. In the same year, 1621, Lord William Howard bought "28 glasses for beare and wyne," xxjs. The former recall the illusive "beare" glasses of the Earl of Leicester, in his inventory of 1588. The fact of glasses at 9d. each being thus freely used for beer shows that there was no scarcity of them. In 1625 20 drinking-glasses were bought for iiijs., a little more than 2¼d. each.

In 1629 "Venice glasses and French glasses" were bought for xxs. The first must have been "glasses of rare and curious sorts," allowed to enter the country by the Proclamation of 1620, and the latter glasses from France, of which the importation was procured by Mansel's back-sliding secretary, Captain Bacon, until it was stopped by order of the Council in 1632. The Venetian "viall glasses for vinegar" would have been the double or gimmal flasks with canted necks, a form which goes back to early, perhaps to Roman times.

The "kanne glasse for my Lord," bought in 1633, is a curious entry. The term implies a short vessel with a handle and a lid of metal. We know what the shape of a can was from that of an oak cup, with a wooden lid and handle, and bound with three hoops of silver, the upper one inscribed, "The can of Sir Thomas More Lord Chancellor of England in Henry the 8th's time."[1] The word "kanne" was also used in the Low Countries to signify a metal or earthenware wine pot.

As early as in 1620 the means proper for cleaning glasses engaged the attention of careful housewives. No doubt during this process then, as now, only too readily, they "came in two in the hand."[2] So Dorothy Dame Shirley in her inventory of this date[3] is shown to have four damask "glasse cloathes," one

[1] In the possession of Mrs. Eyston. The inscription is of the early part of the seventeenth century.

[2] "If any man breake a glasse hee shall answer the preice thereof out of his wages."—Orders for Household Servants first devised by John Harington, *Nugae Antiquae*, x.

[3] *The Unton Inventories; Berkshire Ashmolean Society*, 1841; see Appendix, Inventories, No. VII.

being diaper, while in "my la. Closett" was a case of glasses and "one steele glasse,"[1] and she was the fortunate possessor of "purslin stuffe," and "chinie stuffe," an early instance of the mention of such wares, and which opens out a very tempting vista indeed.

Less considerable in position, but not less historic in name than the stern Warden of the Western Marches, are Sir William and Sir Thomas Fairfax, father and son. The copious inventories of the former, taken in 1624 at Walton,[2] comprise in the Still House a "seller for glasses" and five shelves "all full of glasses with distilled waters." In my Lady's Closet were glass plates, drinking-glasses, and glass bottles, and in a press were "cheney dishes, gally potes, glasses and boxes furnished with sweet meates." Sir Thomas Fairfax at Gilling Castle[3] had only "one glasse vinegar cruett" and "seaven glasses without feet," that is "tumblers." A suggestion that all the glass vessels at these two Yorkshire houses came from Mansel's works at Newcastle respectively sixty and seventy miles off, as the crow flies, would not be an extravagant or exotic demand upon the imagination. In consequence of Mansel's devouring Patent there cannot then have been any other glass-works of importance nearer than London or Scotland.

Edmund Waring, of the Lea, Wolverhampton, had at his death in 1625 glasses and glass bottles, "potts glasses way schales and such like implements," and "a glasse box with tow glasse bottles in it."[4]

We have ventured to assume that crude cups of tumbler form, such as those shown in the early Flemish pictures, were made in England to a limited degree wherever the window-glass was produced throughout the fourteenth, fifteenth, and sixteenth centuries; but they naturally formed no part of the extended English art record which the painted windows so well illustrate. Nor were their irregular shapes, capacities, and material compatible with the fixed quantities and rough usage in the distribution of *Liveries* in great households like those of the fifth Earl of Northumberland and "bounteous Buckingham." The foregoing extracts do nothing more than give a general idea to what extent glass vessels of a better, and of a medium kind, had crept into use in England in the houses of persons of position and condition up to the end of the first quarter of the seventeenth century. The taste for such glass drinking-vessels could necessarily only make its way slowly with a society accustomed from time immemorial to the brilliant glitter of

[1] *The Unton Inventories; Berkshire Ashmolean Society*, 1841; see Appendix, Inventories, No. VII.

[2] *Archaeologia*, vol. xlviii. p. 121; see Appendix, Inventories, No. VIII.

[3] *Ibid.*, p. 148; see Appendix, Inventories, No. VIII.

[4] *Proceedings, Society of Antiquaries*, 2nd S., vol. vi. p. 363; see Appendix, Inventories, No. IX.

silver, or parcel-gilt and enamelled cups, along with the strangely incongruous and depressing heaviness of dismal pewter livery pitchers, and garnishes, and wooden trenchers; and there was as yet no question of a recognised want of proper glass vessels for the lower classes, then, and almost up to the end of the century, using uncouth cups of treen, horn, pottery, leather, or pewter. The manufacture in the Weald of rude glasses, alluded to by Harrison in 1586 as made from "ferne and burned stone," would have almost come to an end in that district on the prohibition of wood, and elsewhere in consequence of the action of Mansel. The lower orders were therefore worse off, in a way, after 1615 than they were before that date. Moreover, it appears that the best glass vessels shown to have been in use in England even up to 1625 were of comparatively very slight artistic account, and far removed in quality from the Italian examples which had come over to this country nearly a century earlier; in this respect also we seem to have fallen somewhat behind the United Provinces and the Low Countries, who were in the first quarter of the seventeenth century so well supplying themselves from their own furnaces with "verres façon de Venise," that "les maîtres eux-mêmes ne sauraient juger la différence."[1] The pictures fully illustrate this phase of their history.

There was at that time no longer a question, nor had there been for at least a century, of importing and reverencing, as in Gothic days, "verres de Damas" or cups of Alexandria: the glamour of the East had faded away, and there is no evidence to show that Venice glasses, such as the Earl of Leicester had at his death in 1588, had met with general favour in great English houses, or were regarded with anything like the mysterious feelings of veneration which glasses from the Orient had excited in Western Europe from the Crusades to the end of Gothic times. No doubt the extreme fragility of Venetian glasses of the great epoch, their costliness, and difficulty of transport, caused indifference as to their merits in England—where the quantity of silver plate was quite astonishing, and appealed more readily to the haughty insular imagination—and tended to deter any but such favourites of fortune as Leicester, who, as Naunton says,[2] "had more of Mercury than he had of Mars" in his nature, from acquiring them.

It appears therefore that, however great an activity had prevailed in England with regard to glass-making before the close of the sixteenth century, glass vessels fit to compete with, or even to take a humble place on sideboards alongside of the Gothic and Renaissance silver vessels, and the heavy late fifteenth-century Venetian glass cups, had not been much fashioned here; there was a feeling of

[1] See Introductory Notices, p. 39.

[2] Robert Naunton, *Fragmenta Regalia*, 1641, p. 45, edit. 1824.

apathy with regard to them and to their manufacture.[1] The noblemen and Privy Councillors, for whom it is stated in the Patent of 5th Feb. 159½ that Sir Jerome Bowes was specially to provide glasses "façon de Venise," "fair, perfect, good and well fashioned"—do not seem to have much appreciated the solicitude of the Crown. These are points which may not be lost sight of in any consideration of the table equipment of an Elizabethan house. But when the time arrived in the first quarter of the seventeenth century that glasses, which might perhaps have been proper as "verres de parade," were produced in England under Mansel, by his "expert Strangers from Forraigne parts" and his native workmen, habits of social life were undergoing a great change. "The king's young courtier" was taking the place of the "old courtier of the queen's,"[2] and English-made glasses were becoming well-established attributes at the better-ordered tables. *Liveries* from the cellar and buttery for breakfasts and suppers, distributed by varlets in the chambers, had quite passed out of vogue—

> The lord ne the lady lyketh not to sytte.
> Now hath eche ryche a rule to eaten by himselfe
> In a privee parlour . . . and leave the chief hal,[3]

and dining in great draughty mediaeval halls, with sideboards of degrees behind the dais, was soon to become extinct, save on special occasions. The lord had long since retired to what was formerly his *solar*, or fashioned a dining-room by striking a wall across the upper end of his ancient hall—as at Broughton Castle, or a withdrawing-room—as has been done, and undone again, in the hall of Thomas, Lord Dacre, at Naworth; and comfort, and a certain amount of refinement, had replaced the boisterous and often riotous mid-day feastings of the entire household, in which the salt was the only separation, and the guédoufle a welcome refreshment, as the old ballad has it, "when this old cap was new." And the lord now sometimes drank "distilled waters," as "Belted Will" must have done, of his own making, out of his "Venice and French glasses," the "stilling glasses" of 1621 having been made use of. Furthermore, when, in the last quarter of the seventeenth century, in consequence of fifty years of extensive manufacture, researches, and discoveries, and, most of all, change of fashion happily aiding, we had passed far in advance of continental glass-makers, the silver vessels of late Gothic and early Renaissance times had themselves in great measure been sacrificed to the needs of the Civil War. Thus, finally, English-made glasses took an honourable and an indispensable place on tables, which they have since retained.

[1] See p. 165.

[2] *Percy Reliques*, vol. ii. p. 318, edit. 1765, "The Old and Young Courtier."

[3] *Piers Plowman.*

Reverting to the choice glass vessels belonging to Henry VIII., it cannot be doubted that some of those mentioned in the list as mounted in gold and silver were so treated from designs and under the direction of Holbein, who died in 1543, the year following the date of the inventory of those precious possessions of a sumptuous prince.[1] A hundred years later, in 1649, an Inventory and Appraisement[2] was made, under the stress of extraordinary events, of all the plate, jewels, etc., in the Upper Jewel House of the Tower, lately in the possession of Charles I., a monarch certainly not less enlightened in his appreciation of the arts than Henry VIII., though less profuse and more judicious in his patronage of them. The Inventory includes, among the plate and jewels, a number of glass cups, usually garnished with gold, some of the mountings being set with precious stones. It is evident that many of these vessels were of the time of Henry VIII., and consequently of late Gothic or early Renaissance character, and actually deriving directly from the collection of that monarch. But the written descriptions are not sufficiently detailed for close identification. In the course of a hundred years "glasses like pottes" had become "cann glasses," and "standing cups of glasse" "wine glasses" of the later inventory. And while the earlier document has the greater interest because it is earlier, the value of the later one is enhanced by the "appraisement" being added, the prices varying from £1 for a "white glasse cann garnished with silver-gilt" to £102 : 15s., the assessed worth of a glass such as connoisseurs may in vain hope to meet with at the present day—"one large glass cup wrought in figures and set in gould, with some stones and pearles, formerly called an aggatt cupp."

No doubt when James I. in 1604 negotiated a treaty of peace with Spain, the first since the Armada, and with characteristic economy gave to the Constable John de Velasco "a great quantity of silver-gilt plate—some of it richly enamelled, ancient, and of great value for its weight,"—"possessions," as

[1] In *Nollekens and his Times*, vol. ii. p. 402 (edit. 1828), the startling statement is made that Cosway had "cabinets surmounted with crystal cups adorned with the York and Lancaster roses, which might probably have graced the splendid banquets of the proud Wolsey."

This scurrilous work was written for J. T. Smith by Dr. Kitchener.—F. Douce to T. Kerrich, 7th December 1826, *et seq.*—*Original Correspondence*, 1633-1828, Families of Rogerson, Postlethwayt, Kerrich, vol. xxiv., in the possession of Albert Hartshorne.

[2] *Archæologia*, vol. xv. p. 274; see Appendix, Inventories, No. X.

The total appraised value of the royal plate in the Upper and the Lower Jewel House of the Tower in 1649, including the Regalia, not at Westminster, and the plate in the Jewel House at Whitehall, was only £14,115 : 15 : 2. The glasses were included among the valuables in the Tower, and, beautiful as they must have been, formed but a very small part of the treasures of the Crown which had been amassed by Henry VIII. and Elizabeth.

Velasco states in the printed account of his embassy to England, "of the Kings his predecessors"—he included among them some of Henry VIII.'s gold-harnessed glasses in addition to the historic gold cup—doubtless the most beautiful thing of its kind in the world—"esmaillée de la vie de Sainte Agnès," which a little more than three years ago, by a curious chain of circumstances, again became the property of the nation for £8000, chiefly raised by private subscription. Whether the King's vicarious liberality showed itself in the same manner when Prince Charles went with "Steenie" on their eccentric expedition to Madrid in 1625—such a guide for such a Prince!—there is unfortunately not the same sort of tangible evidence to show;[1] but it is certain that in one way and another the royal collection of plate and glasses had been much minished and brought low during its transit from the custody of Sir Anthony Denny in 1542 to the charge of Sir Henry Mildmay in 1649. Imagination as to the appearance of the display on the royal sideboards at either period may be quickened at the present day by the contemplation of the noble series of vessels of rock-crystal and of glass, mounted with gold, and enamels translucent and opaque, in a manner which we may now hopelessly strive to emulate or even approach, in the Kunsthistor. Museum at Vienna, in the Silberzimmer and the Pretiosensaal, in the Grünes Gewölbe at Dresden, in the Baierisches National Museum at Munich, or in the Louvre. The jewelled cups of lapis-lazuli, sardonyx, and rock-crystal in the cabinet of gems in the Uffizi belong to a yet higher, though cognate, class of works of art in cup form, and generally of a somewhat earlier period. Their beauty cannot be exceeded; and they have, besides, an interest of a different kind from the names of several artists who fashioned them being recorded.

When Charles I. was transferred by the force of circumstances from New-

[1] Howell, writing to his father 10th December 1624, tells him that he has just arrived from Spain "in convoy of the Prince his jewells." He says that they were valued at £100,000, and were taken as presents to the Infanta, the King and Queen, and various officers of the Spanish Court, and doubtless minor gifts were made. But the mission having failed, the jewels were brought back. Olivares was to have had a great table diamond of eighteen carats weight, and the Infanta a chain of "great Orient pearls" to the number of 276, weighing nine ounces, probably part of the personal ornaments of Queen Elizabeth.—*Familiar Letters*, ut sup., Sec. 4, p. 101, 2nd edit., 1650.

The great value of the jewels taken to Spain is not extraordinary when it is remembered that rich plate, including forty "wonderful masterpieces of goldsmiths' work," valued at £200,000, was delivered to the Duke of Buckingham in 1625 "for taking up money in the Low Countries for our use." The transaction was not completed, but part of the quantity was sold outright, and part pawned, redeemed in 1635, again pledged in Holland for the needs of the Civil War, and again redeemed in 1660.—See *Archæologia*, vol. xlviii. p. 201, "Account of Papers relating to the Royal Jewel-house," etc. The glasses mentioned above were taken possession of by the Parliament in 1649, and sold with the other valuables.

castle to Holdenby House, on 15th February 1646,[1] £2 : 9s. was paid by warrant to John Powell for glasses and knives; and it is recorded by the faithful Herbert that the King kept up royal display in "the last and greatest monument" of Hatton's youth, and lending the gravity of his presence in the great hall at dinner and at supper, and facing the two armorial pyramids, said Grace himself, "standing under the State."[2] He drank at such meals but once of beer, and once of wine and water mixed, "only after fish a glass of *French* Wine, the Beverage which he himself mix'd at the Cupboard so he would have it."[3] It were well to think that the King's boding thoughts, perhaps also at times anxious fears, "in his solitudes and sufferings" at Holdenby, may have been even momentarily dispelled by his modest allowance of cheering French wine—so unlike his father's deep potations—in a Low Country "verre façon de Venise," perchance diamond-etched after his own heart by an accomplished Dutch gentlewoman, a friend of the almost inspired Vondel, and of Cats, and an ornament of the brilliant literary and artistic circles at Muiden and at Middelburg. It will be remembered that the King "drank a small Glassfull of Claret-Wine" just before he passed to the scaffold. Thus Herbert records in his afflicting narrative. A few hours later—a few hours too late—the touching memorial, *Eikon Basilike*, was in the hands of the people.

[1] "Yet may I justifie those Scots to all the world in this, that they have not deceived Me, for I never trusted to them further then to men: if I am sold by them, I am onely sorrie they should do it; and that my price should be so much above my Saviours."—*Eikon Basilike*, 1649, "Upon the Scots delivering the King to the English," etc. See also *Civil War Tracts*, "Joyfull Newes from Holmby, 1647," and "King Charles his Royal Welcome, etc., to Holmby, in Northamptonshire, in Peace."

[2] Herbert's *Memoirs of the Last Two Years of the Reign of King Charles I.*, p. 16, edit. 1813.

[3] *Ibid.*, p. 25. In 1862 the author made careful measurements of the grounds of Holdenby House, and by recognising and applying to them the original plan of the palace and of the gate-house among John Thorpe's drawings in the Soane Museum, the Long Walk on which the troubled king paced rapidly to and fro, attended by the aged Earl of Pembroke, was identified. This noble gravelled platform, perhaps after that at Windsor the most historic one in England, 320 yards long, and 8 yards wide, is now covered by the green sward. It crowns the terraces and runs across the plateau along the line of the south façade of the House, which is now reduced to the north side of the second quadrangle, altered, modernised, and enlarged into a comfortable dwelling which Elizabethan palaces certainly never were. The front of Holdenby House contained a row of twenty-three great four-light mullioned and transomed windows, separated by Corinthian columns, and the whole forming so brilliant a display of glass surfaces as to give rise to the local proverb still in use, "As bright as Holmby." The house having been finished by Sir Christopher Hatton about 1580, the glass for the windows might have been made under the terms of the first Patent issued to Becku and Carré in 1567, for twenty-one years, for window glass-making "à la française," and at their London works. We gather exactly what the glass at Holdenby was like from that still existing at Hatton's other, coeval, and most beautiful house, now, alas! in ruins, built by the same architect—Kirby Hall. It was cylinder-made, of a pale sea-green tint, and had many striations, "blebs" or bubbles in it, and the inequality of surface which added so much to the brilliancy of its appearance in the sun.

CHAPTER X.

CRYSTALLINUM—CONSTITUENTS OF GLASS—GLASS OF LEAD—FLINT GLASS—MERRET'S "NERI"—VITRIFIED FORTS—VENETIAN FRIT—RARITY OF EXAMPLES OF ENGLISH-MADE GLASSES BETWEEN ANGLO-SAXON TIMES AND THE SEVENTEENTH CENTURY—MANSEL'S GLASSES AND THEIR SUCCESSORS.

THROUGHOUT the history of glass-making the aim has been to produce a pure crystalline substance as nearly as possible resembling crystal itself. This perfection the ancient Romans could never quite attain to in consequence of the limited size of their furnaces, pure crystalline glass necessitating long-continued fusion in large pots. But they did approach to crystal glass in the manufacture of what they called *crystallinum*, a colourless glass very light in weight, and held by the Romans in the highest esteem; they could, in fact, never get beyond this quality, and glass in Anglo-Saxon times never approached it. The few examples of *crystallinum* that have been preserved exhibit perfection of form and cutting, but from their decomposed state, and their generally iridescent surfaces, it is not easy to say to what extent the glass composing these precious objects was originally invested with the brilliant and transparent qualities of rock-crystal. From the nature of the decay in the metal, it is certain that it was, like all ancient glass, more or less impregnated with minute bubbles. The *crystallinum* of the Romans was therefore exceptional rather in being colourless and imponderous, than in being "crystalline." But during the whole course of glass-making there was, as has been intimated, the ever present desire to produce the higher quality of metal, the "crystalline" glass, the "verre de luxe," as distinguished from the common green sort made from coarser materials.

It is generally well known that every description of blown glass contains two ingredients essential for its formation—silica and an alkali, the former being the acid, and the latter the base or solvent. The varieties in the nature of glass result from the alkali used, and upon the other constituents—lime, oxide of lead,

alumina, etc.—which may be added. The quality of glass depends upon the purity of the ingredients, and so long as the alkali was derived directly from the ashes of wood, fern, bean-cods, and sea-weed, the character constantly varied and was often inferior.

There are many kinds of glass, differing in their chemical composition. Obviously a knowledge of chemistry is a most important factor in the direction of a glass-house, and, inasmuch as every maker has to a certain extent his own secrets with regard to the precise proportion and preparation of the different ingredients of the frit—secrets which no amateur would wish to declare—and exercises his own acquired skill and experience towards the production of the best quality of crystal, or other glass of its kind, it will be at once understood that any account even of the general scientific and practical aspect of glass-making, either as regards simple or compound glass, cannot be entered upon, save in special instances, in the present work; indeed, the subject has been so fully treated of from both points of view in a number of comprehensive volumes in England and on the Continent, and a vast quantity of receipts for glass-making given, that it would be impertinent to attempt to compress so large a matter into the very limited space that would necessarily be available in a moderate work in which it is essayed to deal with the subject only from a historical and artistic aspect.

A few words may now be conveniently said about Glass of Lead, and Flint Glass.

In Antonio Neri's *Art of Glass*, first published in Italian in 1612, much information is given concerning the materials and processes used in Italy at that time for different kinds of glass, plain and coloured, and enamels. A translation into English by Dr. Christopher Merret, himself a practical glass-maker, was published in London in 1662, and to which he adds—after the manner of "Brooke upon Camden," "Vincent on Brooke," and "Coke upon Littleton"—his own valuable "Observations" upon the whole of Neri's work, having had recourse, for special information, to Italian workmen. He tells us also that "our own workmen in this Art will be much advantaged by this publication, who have within these twenty years last past much improved themselves (to their own great reputation, and the credit of our nation) insomuch that few foreiners of that profession are now left amongst us."[1] The entire volume consequently embraces the whole period during which Sir Robert Mansel had the glass-making in hand, and therefore the important time during

[1] Merret's *Neri*, "Advertisement to the Ingenuous Reader."

which a new era in glass-making was being gradually introduced; the very date of the publication of Merret's *Neri* is a significant one, as will presently be shown.

Allusion has been made more than once to the invention or perfecting of furnaces for making glass, heated with coal instead of with wood; and it is to be recalled that the first patentees for this process were not glass-makers but general metal founders, therefore, *à priori*, not necessarily cognisant of all the details of glass-making. It may be proposed that, either they were not aware of the chemical action which the fumes and smoke of coal would have upon frit containing oxide of lead, in the form of litharge, in the open pots which they used, in carbonising or deoxidising the oxide of lead, however carefully it may have been calcined, and precipitating a part of it in its original metallic state to the bottom of the pot, where its pressure and behaviour were most mischievous in concentrating the heat at one point and calcining holes through which the glass ran out[1]—a difficulty which the closing of the pots between 1608 and 1611 should have got rid of—or that the use of lead had not then been introduced save in very moderate proportions into the manufacture of simple glass. Lead, whether in the form of litharge, or of minium, had, of course, long been employed, together with other metallic oxides, in the composition of compound glass in small quantities, such as for opaque and translucent enamel, and variously self-coloured glass, in all of which combinations such oxides acted as powerful fluxes for the silica and alkali.

In every country in Europe, except England, where crystalline, then often called crystal glass, was produced in the beginning of the seventeenth century, it was made in open pots heated with wood, and that the introduction of coal furnaces in England did not cause any radical change in the constituents of glass of the better kind, "façon de Venise," or of the commoner sorts, we know from the statement of Merret, in 1662, that "Glass of Lead is a thing unpractised by our Furnaces and the reason is, because of the excessive brittleness thereof. . . . And could this Glass be made as tough as that of *Crystalline* 'twould far surpass it in the glory and beauty of it's colours, of which no man can be ignorant, that hath any experience of this Metall."[2] Whether the first patentees of the coal furnaces were aware of the action of coal fumes and smoke upon litharge is comparatively immaterial, though it was desirable for many other reasons to get rid of these noxious agents; but it is very important

[1] Merret's *Neri*, p. 317.

[2] *Ibid.* p. 315.

to learn from Merret that glass of lead was not made at all in 1662, and for weighty reasons which would have had the same force from the beginning of the century. But his remarks as to the beauty and possible capabilities of lead glass indicate at least a desire, perhaps an endeavour, to bring about its general manufacture. This was not to be long delayed.

Now as to Flint Glass. From the earliest times it had been recognised that certain stone, such as trap, and other basaltic rock, is fusible. This was apparently known to the Romans as an item of glass-making. The wide extent to which this knowledge had attained, and was accurately put into practice in *quasi* pre-historic but post-Roman times, in Scotland, is shown by the remains of not less than twenty-five rightly called "vitrified forts" still extant in different parts of the Highlands.[1] Merret appears to allude to this sort of vitrification of stone or other substances, and which he describes as—"fossil glass . . ." "like to the artificial is found under the earth in places where great fires have been."[2] But this was not glass, and it is certain that the makers of the vitrified forts had no idea in this respect beyond that of fusing the outsides of lengths of wall for the purpose of binding it together with the view of protection. There was no question of making glass vessels; indeed, the fusible rock would not have lent itself to such an employment, any more readily than would the vitrified masses of certain clays which occur in brick-kilns. Such material has no viscidity, and would burst under the pressure of the blowing.

The Venetians are shown by Neri to have used at Murano in their frit, instead of sand, for crystal glass, *Tarso*—that is, quartz, or a hard, white, and translucent "marble" found in different places in Tuscany, at Pisa, Carrara, etc., and in the bed of the Arno at Florence. Neri asserts that such of these stones as will strike fire with a steel are only proper to vitrify; the next best, Merret says, commenting on this detail, are the stones which are "inferior to crystal in hardness, but yet are

[1] See E. Hamilton, "Vitrified Forts on the West Coast of Scotland," *Archaeological Journal*, vol. xxxvii. p. 227.

In 1765 John Scott of Edinburgh obtained a Patent for making glass from a single material without the help of any composition.—*Deputy Keeper's Report*, No. 6, App. 2, p. 158. A stone called granulite, which contains in itself almost sufficient alkali to melt the silica of which it is principally composed, has for some years been successfully used by Mr. Siemens, in his glass-works at Dresden, for making bottles, of which large quantities are supplied both to England and to Ireland, chiefly for whisky. This substance came under the notice of Mr. Lindsay-Bucknall about nine years ago, and he accordingly made a search in England for granulite suitable for glass-making, and found it of the proper quality near Okehampton on the borders of Dartmore. The glass which is produced from the Meldon granulite is of excellent quality, and being of a very pale green colour is available for many purposes for which the dark metal is not suitable. The Chinese have long been accustomed to fuse a pulverised rock with nitrate of potash for the manufacture of glass with their usual dexterity.

[2] Merret's *Neri*, p. 222, quoting Ferant Imperatus, Lib. 25.

white and transparent;" the third kind of *Tarso* is "white but not transparent." Next to *Tarso*, Neri commends *Quocoli*, also spoken of as "glasse stone," as hard as flint, taken from the bed of the rivers, in fact pebbles, and also used at Murano. In his observations upon Neri's statements as to fire-striking stones, Merret says that it is true that all white and translucent stones, that will not become lime by calcination, serve well for glass-making; but it is not so, he says, with regard to all fire-striking stones, for many will strike fire but not serve the purpose of the glass-makers; he instances the stones for lining furnaces which contain the melting-pots for preparing the frit, "such as are brought from Newcastle," and others. He continues: "Flints indeed have all the properties, and when calcined, powdered, and serced into a most impalpable powder, make incomparable pure, and white Crystall Metall. But the great charge in preparing them hath deterred the owners of our Glass-houses from farther use of them."[1]

The employment of flint had, perhaps, been first introduced into England by the Italians of Edward VI.'s time, but more likely by the Lorraine gentlemen, who left calcined flints behind them at the Buckholt furnace. The effect of the large proportion of silica was glass of a finer quality and clearer colour than would result from the use of impure sand, which contained iron; and the glass so made was properly called Crystalline; it was the best that could then be made, and was with equal or more propriety called Flint Glass. Flints having been long abandoned in England when Merret wrote, for "a very white sand, such as we strow upon writing," no advance was made until 1663, when Tilson,[2] being aware, as Merret and others were, of "the glory and beauty" of "glass of lead" almost within reach, found means to increase the charge of the metal, and so manage or modify the other ingredients of the frit as to produce a crystal glass nearly equal to the quality which was claimed for glass of lead; the drawback of brittleness, however, appears to have remained.

Reference has been made to the extreme rarity of actual examples of English-made drinking-glasses dating from between the end of Saxon times and the middle of the sixteenth century.[3] Not only are we well-nigh entirely ignorant as to the precise forms which English glass drinking-vessels took during this long period, but we are almost equally uninformed, in consequence of a like absence of examples of unquestionable English make, with regard to the appearance of the glasses made in this country from the time of Elizabeth to the end of the first quarter of the seventeenth century. The countless thousands of glasses

[1] Merret's *Neri*, pp. 7, 258.

[2] See Appendix, Original Documents, Nos. XXV., XXVII.

[3] See p. 147.

which were successively fashioned here during the latter period by the London and Sussex glass-makers, the Normans, the Lorraine men, Vercellini, Bowes, Percivall, Zouche, and by Mansel up to the end of his career, have left barely a trace. The Buckholt furnace of the Lorraine gentlemen has surrendered nothing but fragments; we can only gather what the glasses of Vercellini, Bowes, and Percivall were like because they were Venetian, or façon de Venise; and similarly with regard to the appearance of some of Mansel's earlier glasses, because he employed certain Venetians and Mantua men. Our own pictorial records, such as the rude woodcuts of tavern interiors heading the Broadsides in praise of ale and wine-bibbing, tell us nothing, because only wooden, earthen, and pewter cups were then used in ordinaries. Contemporary Venetian glasses, later ones carrying traditional shapes, and again the evidence of the Low Country pictures, help us therefore in this respect. But after the departure of his Italians Mansel continued to make Venetian glasses without their assistance, as we know from his petition to the Lords of 1639,[1] in which he stated that he made as follows: Ordinary drinking-glasses for beer at 4s. a dozen, and for wine at 2s. 6d. a dozen; crystal Venetian beer glasses with covers at 10s. a dozen, and at 11s. a dozen of extraordinary fashions, and for wine at 7s. and 8s. a dozen; his English crystal beer glasses, which were never before made in this kingdom, "of all fashions that are desired and bespoken," he sold for 9s. a dozen, and similar crystal wine glasses for 5s. 6d. a dozen, and the dearest, of extraordinary fashions, for 7s. a dozen; also mortar glasses, that is small glass vessels for lights, for 2s. 6d. a dozen. There is indirect evidence showing what all these later glasses of Mansel's were like.

To the best of the author's knowledge and belief no perfect examples of the works of any of the above-mentioned glass-makers in England, during the latter half of the sixteenth century—with the exceptions of the cup of Queen Elizabeth at Windsor Castle, of which the cover is wanting, Mr. Woodruff's glass, Lord Burghley's tankard, and the inscribed glass in the British Museum, dated 1586—have survived to the present day. All have succumbed to "the tooth of time, and razure of oblivion." It is a long-drawn and dismal panorama of undesigned and natural destruction, commonly and euphemistically called "wear and tear," only paralleled by the wicked demolition of the ancient church windows during a short and vicious period.[2]

A diagram of a wine-glass in 1621, given in Peacham's *Compleat Gentleman*,[3]

[1] See Appendix, Original Documents, No. XXIII.

[2] See p. 147.

[3] P. 320, 3rd edit., 1661.

not only indicates the appearance of some of Mansel's earlier productions, but is interesting in showing a short baluster stem like that of a silver cup of the period, both forms deriving from a common Renaissance type (Fig. 158). The general shape of Peacham's glass can be readily recognised in the Venetian examples denuded of their decorations, from which it originates. Contemporary drawings of somewhat degenerate versions of the same shape,[1] which carry the inquirer at once and finally out of the centuries of darkness into daylight, will be treated of at large later on. They leave no doubt as to the appearance of some of the glasses of Mansel's make in the latter part of his career, and of those of his immediate successors, and they in their turn carry on and complete the continuity during the three last quarters of the seventeenth century. We shall also see a temporary re-introduction of the manufacture in England of pure Venetian glasses "of rare and curious sorts" at a time when the taste for such objects was beginning to give way in the Low Countries.

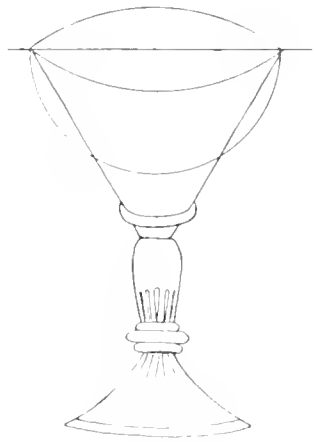


FIG. 158.

Coming then at last to actual examples of strictly English glasses, the origin and progress of the heavy moulded and knopped stems, the air twisted, the opaque white twisted, and coloured, and the faceted stems, together with other special features of wine and punch glasses in their different series will be shown. The course of the champagne glasses and those for beer, ale, cider, cordial waters, etc., will be traced, and the collateral succession of those of a more modest but not less interesting kind, for ordinary tavern and household use—which have been, but may not any longer be overlooked—will also be indicated. The classification attempted of all these drinking-vessels will be the natural result of tracking them down through their changes. And while the intimate association of certain groups of glasses and their decorations with great political movements, temporary public feeling, or peculiar social customs will be recalled to mind by their scrutiny, their distinct national character will become further assured by the form of the glasses and the knowledge of the ringing quality of the metal itself.

[1] Sloane MS., 857. Papers relating to the Glass-sellers.

CHAPTER XI.

PATENTS CONTINUED — THE DUKE OF BUCKINGHAM'S PETITION — PATENT TO THOMAS TILSON FOR GLASS OF LEAD — THE DUKE OF BUCKINGHAM'S VENETIAN GLASSES — GLASS PLATES FOR MIRRORS AND COACHES.

THE story of glass-making in England as shown by Patents and State Papers will now be continued from the point where it was left off under the year 1660,[1] soon after the death of Mansel, down to the reign of George III. Again the period to be entered upon is important because it comprises the introduction and the gradual improvement of "flint glass" or "glass of lead." The handling of the Patents and documents of this era will bring the strictly historical portion of the present work to an end.

On 6th September 1662 Henry Holden and John Colenet obtained a Patent[2] for the sole use of their new invention for making glass bottles, vessels for distillation, etc. The name of the junior partner indicates a member of the great glass-making family of De Colnet in the parts of the Low Countries then under the lordship of the King of Spain. Like the De Bonhommes at Liège, who made "flint glass à l'anglaise" from 1680[3] to counteract the importations of Bohemian and Silesian glass—a fact of great importance in its bearing upon the introduction of "Glass of Lead"—the De Colnets at Ghent, Namur, Charleroi, Barbançon, Saint Hubert, and other places engaged Englishmen, and working *more anglicano* also produced "verres à l'Angleterre."[4] Consequently when the time came these glass-makers were somewhat prepared to withstand the mercantile effects of the Peace of Utrecht in 1713, which opened the enormous importations of Prussian and Silesian glasses, and gave the death-blow to artistic glass-making in the Low Countries.

[1] See p. 203.

[2] *State Papers*, Domestic, 1662; *Hist. MSS. Comm.*, Report VII., p. 164*b*.

[3] See Introductory Notices, p. 40.

[4] *Ibid.* p. 41.

The Bill to confirm Holden and Colenet's Patent had been delayed owing to the late rebellious times, which dealt a rude blow at the Patent System. Now it was petitioned against by John Vinion and Robert Ward,[1] both names well known in the glass-making trade in the seventeenth century, and was not proceeded with. The petitioners showed that nearly thirty years before, namely about 1632, Sir Kenelm Digby first invented glass bottles and employed Colenet and others to make them for him.[2]

In October 1662 Martin Clifford, Thomas Powlsden, and others obtained a Patent of the invention of making "crystal" glass, of which they claimed to be the discoverers, but no information is given as to its manufacture.[3]

On 30th June 1663 the Duke of Buckingham, who had been making glass at Greenwich under a Patent, showed in a petition to the King[4] that he had long been at great expenses in trials and experiments to find out the art and mystery of making looking-glass plates, "a manufactory not knowne nor euer heretofore vsed in England," and of late forbidden by the Venetians to be exported unless wrought and polished, to the great loss of looking-glass makers

[1] *Hist. MSS. Comm.*, Report VII., p. 164*b*.

[2] This is an interesting item of information, and, though not true as to "the Ornament of England" having "invented" glass bottles, shows the settled practice at the time of putting wine and other liquors into bottles for sale in ordinaries, or for table use, instead of drawing them fresh from the cask in latten or pewter vessels, after the mediaeval manner, and for its allotment in *liveries*, as in the fifteenth and sixteenth centuries. The ancient method of distributing wine from long-spouted metal "pots" lingered in the Low Countries, and is depicted in many Dutch pictures of banquets, such as Franz Hals's "Feast of the Arquebusiers of St. Adrian," 1633, at Haarlem; and in Van der Helst's great picture, "Het Schuttersmaaltijd," at Amsterdam, of 1648. The appearance of Digby's bottles may be well known from the ancient bag- or purse-like shape which they assumed, the word itself being derived from the German *beutel*, and the thing from the leather bag or bottle, such as Henry VI.'s enviable shepherd used for "his cold thin drink," and which was in common use for liquids in mediaeval times. Glass flasks of this shape may have been as old as glass-making in England, because they were the easiest production of the glass-blower. The name survives in the little wooden barrels which took the place, within living memory, of the leather barrel-shaped bottles in harvest-fields in Northamptonshire and other Midland counties. Ale in glass bottles was sold generally in ordinaries in Elizabeth's time; and Markham, in his *English Housewife*, 8th edit., 1675, p. 184, speaks of round bottles with narrow necks for "Bottle-Ale," having the corks "fast tied in with strong Packthread." The shape of glass bottles of Digby's time underwent but little change until after the eighteenth century. They are still lineally represented by the *Stein* wine and other special continental globular bottles. Their form was also fixed on the Lambeth tin-glazed "whit," "sack," and "claret" bottles of Digby's date. Besides his well-known philosophical studies, Digby interested himself in many other sciences, including that of medicine, the distilling of cordial waters, the compounding of varieties of *aqua composita*, the making of wine, metheglin, cider, together with directions for cookery, etc., all of which are set forth in his *Choice Experiments*, 1668; and his *Closet Opened*, 1669. In the Slade Collection is a cylindrical Roman glass bottle, 4½ inches high, stopped with a decayed cork partly covered with a corroded bronze capsule. This was found at Cologne, and contains a mass of hardened substance which may once have had a flavour imparted to it in the smoke of the "apothecae."

[3] *State Papers*, Domestic, October 1662.

[4] Appendix, Original Documents, No. XXIV.

and grinders in London. In consideration of the perfection he had arrived at in making "christall," and his ability to furnish such looking-glass plates as good or better than Venetian, Buckingham prays for a renewal of his Patent for making crystal glass, with a clause therein for the sole making of looking-glass plates, glasses for coaches, and other glass plates, of which he claimed to be the first discoverer and promoter. The King referred the petition to his Attorney-General for his opinion. Sir Geoffrey Palmer[1] reported, 20th July, that the required privilege might be granted for the term of fourteen years if the invention was a new one, as affirmed by the petitioner, as to which point he could find nothing to the contrary; but that a proviso should be inserted to revoke the Patent if it appeared to be of public prejudice or not a new invention.

In the same year, 4th August 1663, the Attorney-General was ordered, upon the surrender by Martin Clifford and Thomas Powlsden of the benefit of their invention, for which a Patent was granted October 1662, to prepare a Bill under the Great Seal containing the King's grant to Thomas Tilson,[2] "not only of the sole makeing and venting of the said Cristall glasse, but also of looking-glasse plates of all sorts of glasse w^tsoever wch shall be made in any Our Dominions for the terme of 14 yeares, according to the statute in that behalfe, it being a new invencõn and manufacture." In the grant to Tilson,[3] which was made 4th September, it was declared that the "Christall glasse" was "his Invencõn."

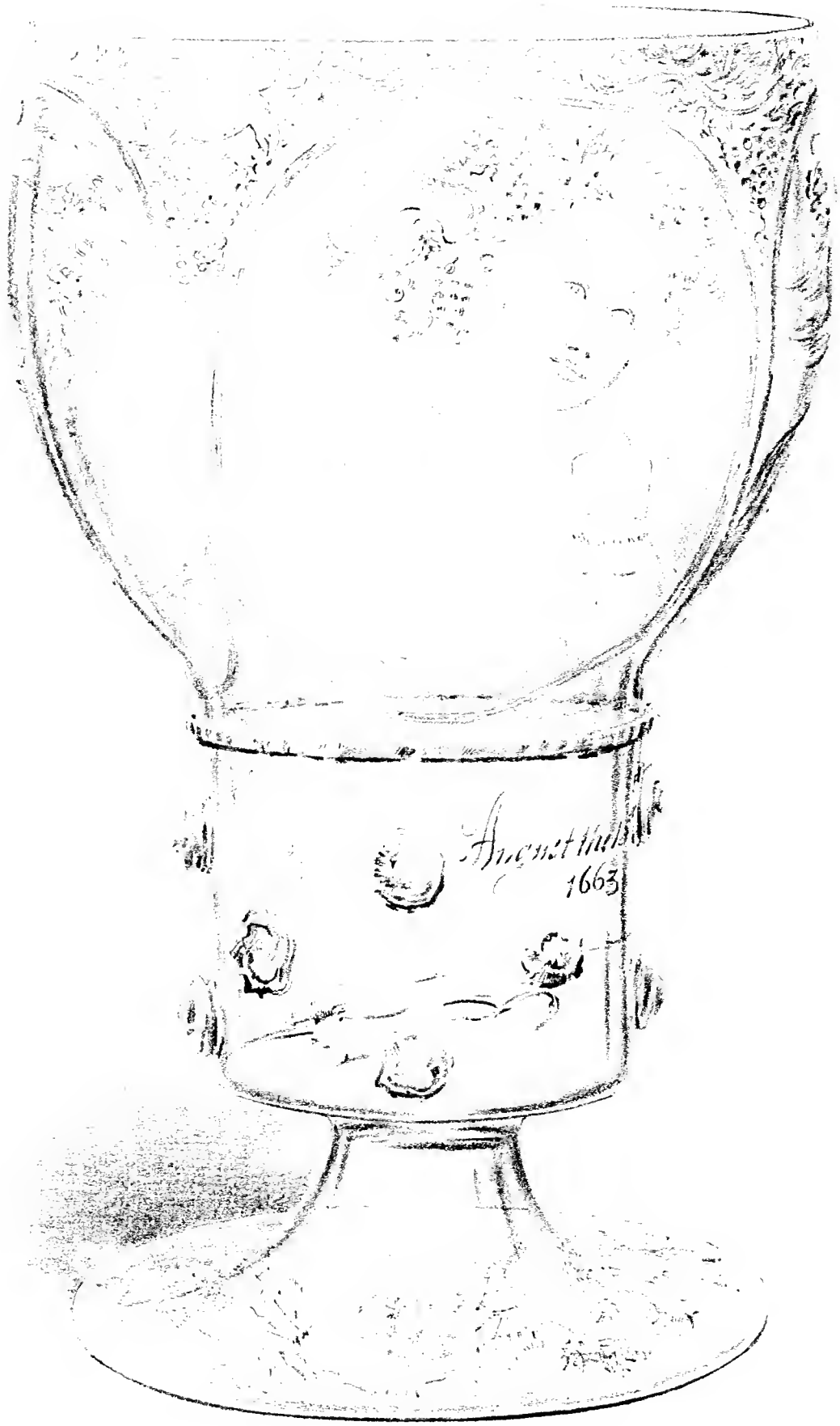
In the meantime, 21st August 1663, while this business was going on, Bryan Leigh, Adam Hare, William Broughes, and Ralph Outlye petitioned the Crown,[4] stating that they had "found out a way never yet before discovered, of extracting out of Flinte all Sorts of lookeing glasses plates both Christall and ordinary and all manner of Christall glasse, farr exceedeing all former experiments both at home and abroad." This proposal to make glass from flint was a reversion to the old and expensive fashion which Merret tells us in 1662 had been abandoned. The petitioners prayed for a Patent for fourteen years, with prohibition to all other persons. The King, "remembring something of this nature to be already passed to his Gr^e the Duke of Buckingham," referred the matter to the Attorney-General. Evidently his report was not favourable, and

[1] He died in 1670, and is commemorated in East Carlton Church, Northamptonshire, by a standing figure in marble, together with that of his wife. Both are represented in shrouds, after a peculiar fashion of the time. They are engraved in W. H. Hyett's *Sepulchral Memorials*, 1817.

[2] Appendix, Original Documents, No. XXV.

[3] *Ibid.*, No. XXVII.

[4] *Ibid.*, No. XXVI.



28.—DUTCH GLASS.

in view of the terms of Tilson's grant it would appear that the proviso inserted in the privilege to the Duke of Buckingham had been resorted to, and that the Patent to the Duke had become void, as not implying a new invention or an improvement of one already in use. His system was apparently a modification of the use of flint after the Italian fashion; Leigh and his company would fall into the same condemnation.

As in the case of the prohibition of wood in 1615, it was desirable to assure the commercial success of the crystal-glass and the looking-glass trade by the interdiction of foreign imports. Accordingly, 25th July 1664, a Proclamation was issued[1] setting forth "the great usefulnes and commodity" of making looking-glass plates, etc., "a manufacture lately found out, and brought to perfection by some of our natural English subjects," and prohibiting the importation so largely carried out since the said invention had been exercised in England. Throughout the Proclamation the words "crystal," "crystalline," or "flint" are not used, or the expression "all sorts of glasses" in the grant to Tilson.

A late acquisition to the British Museum is a glass, 9 inches high, like a footless roemer upon a conical base. It is a very uncommon shape. The upper part of the bowl is engraved with the diamond point, representing the four seasons, and the lower portion with $\frac{\text{II.}}{\text{W. E.}}$ within branches of bay, and the date opposite—*August the 18th 1663*—and decorated with small "prunts," slightly gilded. This is a Dutch glass engraved and dated after the manner of the accomplished ladies of the Roemer Visscher family (Plate 28). It has considerable interest, and may be mentioned here from being dated in the year and at the very time when so many negotiations were going on with regard to Patents for new processes of crystal-glass making in England, ending in the grant to Tilson and the Proclamation of 25th July 1664.

It will be remembered that Mansel, as early as in 1620, had "perfected" the complete manufacture of looking-glasses, "never," as he truthfully said, "made or attempted here before."[2] This was with crystalline glass, the best then to be obtained. The Duke's statement to the King in this regard was not true. He was proclaimed a traitor on 11th March 1667, and his conduct is well set down in the pages of *Pepys*. It is impossible that the knowledge of looking-glass-plate making had died out in England, but the free importation of foreign glasses and glass plates, allowed by the Proclamation of 1635 on the termination of the privilege to Mansel, had flooded the home market and discouraged the

[1] Appendix, Original Documents, No. XXVIII. [2] *Ibid.*, No. XX.

manufacture, as is notified by the Proclamation of 1664. In the latter part of Mansel's time the quality of the glass had greatly improved, and the use of the word "crystal" by the applicants in the place of *crystalline* was not only a change of word but implied a modification of material. That important further improvement was made in or about 1663 is evinced by the fact of four persons or parties within that year claiming, and three of them actually obtaining, Patents for the new invention of making "Crystal Glass." The applicants for Patents in 1660 proposed to do no more than make glass as Mansel made it; between that year and 1663 the Duke of Buckingham and the other petitioners had been trying experiments, and by their own showing had all almost simultaneously arrived at much the same successful issue; but only one seems to have attempted to make "glass of lead."

At this distance of time from the circumstances, and with the lack of technical evidence, it is difficult to suggest by what proportions of ingredients in the frit, or by what management Tilson's new invention was carried, or how far crystal-glass making was now pushed towards success. No doubt each applicant made out the best case he could, but the fact of the Attorney-General, who must have had all the evidence before him, finally pitching upon Tilson as the real inventor, to the exclusion of all the others, must be taken as conclusive in Tilson's favour. This is not resting upon slight documentary evidence more than it will bear. Again, as collateral testimony, so important was the invention considered, that when the Glass Sellers and Looking-Glass Makers obtained, 16 Charles II. (1664), a confirmation of the Charter granted to them by Charles I.—an instrument which would also have passed under the eye of the Attorney-General—the rights of Thomas Tilson, "for the sole making of Christal Glasses and Looking Glass Plates of all sorts of Glass whatsoever," are specially reserved. The Proclamation of 1664, and the new era—far more important than that of which Mansel was the exponent—which was opening for native glass-work, made it very desirable that the glass-sellers should be united.

With further regard to Tilson's invention, it was not a reversion to the practice of "extracting glass from flints" which was in question, because the Attorney-General set the petitions for that process aside. It is certain that the constituents of the frit and its preparation were affected by Tilson's process rather than the character of the furnaces, that more brilliant crystal as distinguished from crystalline glass was the result, and that his main object was the making of looking-glass plates, though he also made drinking-vessels. We are therefore forced to the conclusion that Tilson's invention of 1663 was "Glass

29.—ENGLISH GLASS—"FAÇON DE VENISE."

of Lead," of which Merret spoke so highly in 1662. It is quite conceivable that Tilson's glass was very proper for mirrors, but on account of its brittleness not so much so for drinking-vessels; hence the "perfecting" was not yet reached. It may be likewise suggested that, inasmuch as Tilson's improvement appears to have mainly consisted in a larger proportion of oxide of lead—an idea derived perhaps from observation of the use of lead oxide as a glaze for pottery—it must have been by a change in the management of the fritting process that such marked advance was made. It was, however, only an important movement in this direction, for the process was, so to speak, still tentative, and so gradual, that it was not until after the middle of the eighteenth century that the highest point of excellence in "flint glass" was attained.[1]

In consequence of the term "Flint Glass" having become transferred to brilliant "Glass of Lead," of which flint formed no part, much confusion has arisen with regard to the right understanding of scientific descriptions in the literature of the time, as to points concerning which precision of language is absolutely necessary. To add to the confusion, "pebble glass" is also spoken of, an expression still vaguely used. The persistence of the term "flint glass" up to the present day is misleading, but it is interesting as a philological survival.

Undeterred by the loss of his Patent for Venetian looking-glasses, the Duke of Buckingham turned his attention to the making of Venetian drinking-glasses, under Royal patronage, at Greenwich, apparently near Mansel's old furnace. It is probable that he had introduced a company of Venetians before 1662. A beautiful glass in the possession of Mr. Henry Festing here comes before us as an undoubted and dated example from Buckingham's glass-house. The form of the vessel is English, the colour a pale greenish-brown; it is devoid of brilliancy, and its weight is only three ounces, showing that Buckingham was not making "glass of lead" in 1663 (Plate 29). The engraving is all executed by the diamond point, probably by a Dutch artist; it was a mode of decoration very little practised here.[2] The most interesting feature in the engraving, besides the portraits of

[1] In a petition of the Glass Makers' Company, 9th March 1710, to the Lord Mayor and Court of Aldermen, for the Revival and Establishment of the Livery, it is stated that "the Glass Manufactory is of late years much improved, especially in Flint and Looking Glasses, beyond what is done in any known part of the World to the great honour and benefit of this City and Kingdome."

[2] This glass was perhaps presented to the King by Buckingham, and a slight stretch of imagination might figure it as forming for a time an ornament of one of the cabinets in "that glorious gallery" at Whitehall. It appears to have been subsequently in the hands of the family of Grenville of Stow, Morwenstow, Cornwall. It came into the possession of the late masterful parish priest, the Rev. R. S. Hawker; from his niece it passed, in 1860, to Mr. J. Singer; and in 1863, two centuries after its fabrication, unscathed, to the present owner.

the King and Queen, is the Royal Oak with the King's head in a medallion. The trunk is shown as hollow, indicating that the tree in whose branches Charles II. and Carless took refuge was then well recognised as an old one, thus entirely depriving the existing "Boscobel Oak" of any claim to veneration.

On 16th April 1666 a warrant was issued to the Commissioners of Ordnance[1] to deliver to the Duke of Buckingham fifty bags of saltpetre, that is nitrate of potash, then highly valued as a solvent or flux in the manufacture of fine glass. This entry shows again that Buckingham was making glass with potash as the alkaline base, and other considerations, already touched upon, point to lime, and not oxide of lead, as the earthy base. These constituents, combined in proper proportions with silica in the form of pure white sand, would have exactly produced glass assimilated to that of Venetian make, such as is shown in the Royal Oak cup. Its "record" is therefore thoroughly established. The order was issued to the Commissioners of Ordnance for the prevention of interruption and cost in the glass-works, described as having been then lately set up at the Duke's expense, and this further marks the interest which the King took in the matter.

Under the date 10th June 1673, Mr. Evelyn records: "Thence to the Italian glass-house at Greenwich where glasse was blown of finer metall than that of Murano at Venice."[2] Evelyn spoke from a personal knowledge of Venetian glass, for he was at Murano in July-August 1645, viewed the furnaces, and saw the processes of manufacture.

It appears that the Proclamation of 1664 did not touch or affect the importation of finished and framed looking-glasses from Venice. The Council was therefore petitioned by certain of the Glass Sellers' Company that this introduction be stopped. On the other hand, it was shown that there was only one glass-house in England making looking-glass plates (Tilson's), and that the petitioners were simply endeavouring to limit the necessary supply of finished glasses from other sources for their own private ends, namely, to import largely and then obtain a prohibition in order to raise the prices. The matter was referred to the Council of Trade, who declared that if such prohibition was obtained it should be to the jeopardy of the Patent, as well as causing the calling in of the Glass Sellers' Charter,

[1] *State Papers*, Domestic, April 16, 1666.

[2] *Diary*, vol. ii. p. 292, edit. 1879. Similarly in 1613, when John Ernest the Younger, Duke of Saxony, went on his travels and visited Antwerp, the historian Neumayer von Rammsla records in *Reise im Frankreich, Engelland und Niederland* (Leipzig, 1620): "J. F. Gn. wurde auch der Ort gezeiget da man Gläser auf venedische Art machet, welche an Schönheit fast den Muranischen oder Venedischen gleich gehen, und sind es Italiäner, so sie machen."—See H. Schuermans, Lettre II., pp. 356, 374.

and giving liberty to all to set up furnaces and make glass plates. Nevertheless, the petitioners persisted and presented a Bill to Parliament, ostensibly in the name of the Company, but with signatures fraudulently procured, for a prohibition both of wrought looking-glasses and drinking-glasses.[1] If these designs had not been successfully combated, a large trade in foreign glass would have been checked, much loss to the Customs would have accrued, and it is by no means sure that home labour was able to supply the needs of the country as regards the rapidly increasing demand for glass plates both for looking-glasses and coach windows. As to drinking-glasses they stood upon a different footing, and the imports from Venice, large as they were, had the effect of keeping the prices down, and of stimulating the efforts of English glass-makers competing with them. The importations of drinking-glasses from the Low Countries were unimportant complements of the earthenware trade with Holland.[2]

[1] Appendix, Original Documents, No. XXX.

[2] Taking the declaration of some of the London glass-sellers in December 1670 concerning the badness of English glass, and that of Greene to Morelli on 10th February 167$\frac{9}{1}$ as to the inferiority of Venetian glass to it, and allowing for exaggeration on both sides, we may conclude that there was a difference, and that it lay rather in the character of the glass than in the designs of the glasses themselves; as time advanced, the distinction between the English and the foreign metal rapidly became more marked. It was natural that superiority in manipulation should remain with the Venetians because the perhaps more ductile metal surrendered with greater readiness to their long-descended artistic treatment. This is in no depreciation of the English glass, which was now advancing towards a perfection and an artistic handling of quite another kind which the Venetians have never approached.

CHAPTER XII.

GLASSES IMPORTED FROM VENICE MADE TO THE ORDER OF JOHN GREENE AND OTHER LONDON GLASS-SELLERS — GREENE'S LETTERS EXAMINED — HIS DRAWINGS OR "FORMS" — DURATION OF GLASSES — EXISTING EXAMPLES — ENGLISH-MADE CONCURRENT GLASSES — THEIR CHARACTERISTICS — GLASSES WITH COINS IN THE STEMS — SUNDRY GLASSES OF THE TIME OF CHARLES II.

With regard to the drinking-glasses imported from Venice there has, fortunately, been much information preserved in the "office copies" of Letters from John Greene, a London glass-seller, and his partner, Michael Mesey, to Signor Allesio Morelli, glass-maker in Venice, between 1667 and 1672.[1] Besides the letters, copies in pen and ink of the full-sized drawings by Greene, sent to Venice to be worked from, and which accompanied the orders, have also been preserved; the number of the different figures of glass vessels amounts to 173.

What is better still, some results of these materials—existing examples of a few of the glasses and vessels themselves, can be clearly identified. Thus we are brought into the open at last.

A general perusal of Greene's letters shows that the business had been carried on to a large extent before 1667, not only by him, but by other members of the Glass Sellers' Company, to the great advantage of "the Turkey merchants" or shippers of commodities from the East. Besides the enumeration of the different glasses to be made most carefully according to the "forms" or "patterns" sent, we find that the fashion of some special ones was left to the Venetian, but they were to have both "feet" and "ears." The number of wine and beer glasses, both large and small, of shapes now never covered, but which are specified by Greene to be made both with covers and without them, is remarkable as a usage of the time. The alternative of glasses for wine and beer with plain or ribbed bowls is

[1] Appendix, Original Documents, No. XXIX. See Introductory Notices, p. 45.

frequently expressed, and some of the vessels are marked to be "calsedonia," "speckled enameld," or "milke whit." Tumblers horizontally and vertically fluted are also depicted. Morelli seems to have generally performed the orders satisfactorily, but damage was sometimes caused by wet having "stay'ned" and "rotted" the glasses, showing the tender nature and easy disintegration of the metal, so different in density to English glass. The colours of the enamels were sometimes bad, and the chests smaller than they should have been, the freight charges not abating correspondingly. Special instructions are given in each letter that the glasses should be very clear and white, and exact according to the "patterns" or "forms" as to fashion and size. This exactness was certainly carried out, as a glass in the author's cabinet shows—indeed, Greene's notes on the drawings prove that he verified this point; the shapes were such that the English habits required, and the actual remaining glasses have much value accordingly.[1]

Means were taken, as a matter of course, to defraud the Customs by hiding prohibited unfoiled looking-glass plates from Venice in the bottoms of the cases, with duplicate "factorys" or invoices. The descriptions of some of the glasses for which no patterns were drawn sound very attractive. What collector would not like to find at the present day, for instance, a "speckled enameld coverd beere glasse" or "a clouded calsedonia coverd clarett glass," "with feet and ears of good hansom fashions," ordered from Venice 28th August 1668! Perhaps now that attention has been called to them they may be recognised, with others of which outlines will presently be referred to, and brought to light from hidden places in ancient houses or homesteads. It is greatly to be wished that modern glass-makers would turn their attention to the re-introduction of table glasses in "clouded calsedonia" and "speckled enamel"; they would be a welcome relief from the shrill perfections of modern flint glass.

Nearly every case that was sent over contained necklaces of beads and strings of false pearls. Much loss ensued from breakages—as many as forty dozen glasses in a consignment of 520 dozen in 1669, ordered 28th August 1668. On 17th September 1669 Greene ordered 600 dozen more drinking-glasses; he also gave directions for 576 unfoiled looking-glass plates to be sent in separate cases. Intricate steps were taken to deceive the Custom House both as to sizes of glass plates—which were measured by the Venetian system—and the quantity of drinking-glasses, false invoices being delivered with

[1] The funnel-shaped cup or bowl is associated with the most graceful of Venetian glasses. The form was very successfully adapted in Low Country glasses "façon de Venise," beautifully etched by Dutch artists. In the English glasses and their Venice-made competitors, strength and solidity were the main requisites.

the chests, and true ones forwarded to Greene. The order for glass plates was so directly contrary to the terms of the Proclamation of 25th July 1664 that it might seem that the scope of that instrument had been relaxed by an Order in Council; but it is apparent that such plates could be introduced by the payment of duties so much enhanced as hardly to make the importation profitable; hence the temptation to deception. Thus in 1667 a grant was issued for landing, Customs free, two looking-glasses, silk, and vermicelli, for the King's use.[1] It is evident that it was worth Greene's while to send to Venice for unfinished plates, paying duty for some, and cheating the Custom House as regards others. On 18th January 167$\frac{0}{1}$ 74 dozen glasses were ordered, and 400 dozen on 10th February, when Greene declared that he could get in London better looking-glasses, both Venetian and home made, than the imperfect ones Morelli sent him. These further quantities of drinking-glasses, looking-glass and coach plates were to be shipped for preference in two vessels "for fear of the Turks," then the universal bugbears. Hardened and allured by previous successes, Greene again requested duplicate invoices—naively styled the right one and the wrong one—and the omission of six or eight dozen of drinking-glasses in the invoice for every chest, and prepared by various petty devices to defraud the Custom House of duty. Greene also imported toys and brushes from Venice, and small ebony and ivory hour-glasses, which are occasionally met with at the present day. On 18th January 1671 some extra looking-glasses were ordered to be so hidden at the bottom of deep chests of drinking-glasses as to escape the scrutiny of the "searchers." On 3rd May 1671 Greene again told Morelli—he held it over him, in fact, as a gentle inducement for good treatment—that very excellent drinking-glasses were then made in England, and better looking-glasses than any that came from Venice. Allowing for trade exaggeration, this is still an important testimony in favour of English glasses.

The orders to Venice had now become much smaller, and complaints increased both as to prices and quality. On 30th May 1672 Greene pronounced that the Venice glasses were indifferent as to clearness, a point which is quite borne out by some of the existing examples of this time, but he acknowledges that they were generally stronger, that is, less brittle, than those of English make. In this, the last order of which record has been preserved, twenty dozen of "cruitts for oyl and vinegar" are included. The drawings show that some of these were the gimmal canted bottles following the ancient, perhaps the Roman pattern. Others were flasks with narrow necks and expanded mouths,

[1] *State Papers*, Domestic, 1667.

plain and ribbed. The last two letters prove that the looking-glass market was falling, and that the Venetian drinking-glasses were rapidly being driven out by those of English make. The casual mention by Greene of other dealers in Venice glasses shows that for some years the importations to London had been very large, and it will be at once understood that they were only so introduced to compete by their cheapness with those of English origin. The law allowed the importation, and the glass-sellers took advantage of it. From the time that the English "flint glass" improved—as we know it did, from Greene's statements to Morelli of 10th February 167$\frac{0}{1}$ and 3rd May 1671—the Venetian imports gradually fell away, and the period when English glass gained the ascendant in an early stage of the "perfecting" of "crystal" or "flint glass" may be roughly reckoned from the time of the introduction of the manufacture of "flint glass à l'Anglaise" on the Continent, and of large exportations thither, which increased enormously during the eighteenth century.[1]

With regard to Greene's pen-and-ink drawings or "forms," they completely illustrate the glasses ordered in the eight letters which have just been alluded to. They were evidently his standard or "stock" patterns, which were copied over and over again, exemplifying also somewhat earlier as well as slightly later orders. The number of outlines is 173, the use of each being specified, whether for wine or beer, or both, and marked as to the number of dozens by figures which fluctuated in the copies according to the varying requirements. This is taking no account of a few unfinished pencil outlines, repetitions of some of those in ink. When it is pointed out that the text of the letters, together with the outlines, represent more or less fully the operations of one London glass-seller only with Venetian glass-wares, implying the importation by him, between 1667 and 1672, of nearly 2000 dozen of glasses, etc., some idea may be formed of the extent of the introduction of Venetian-made glass drinking-vessels into England during the few years in which the trade flourished in the reign of Charles II. This is irrespective of more than 1100 looking-glass plates, of which the sizes are carefully specified in the letters, and the quantities of false pearls which were imported by Greene during the same period, and with which we have nothing to do.

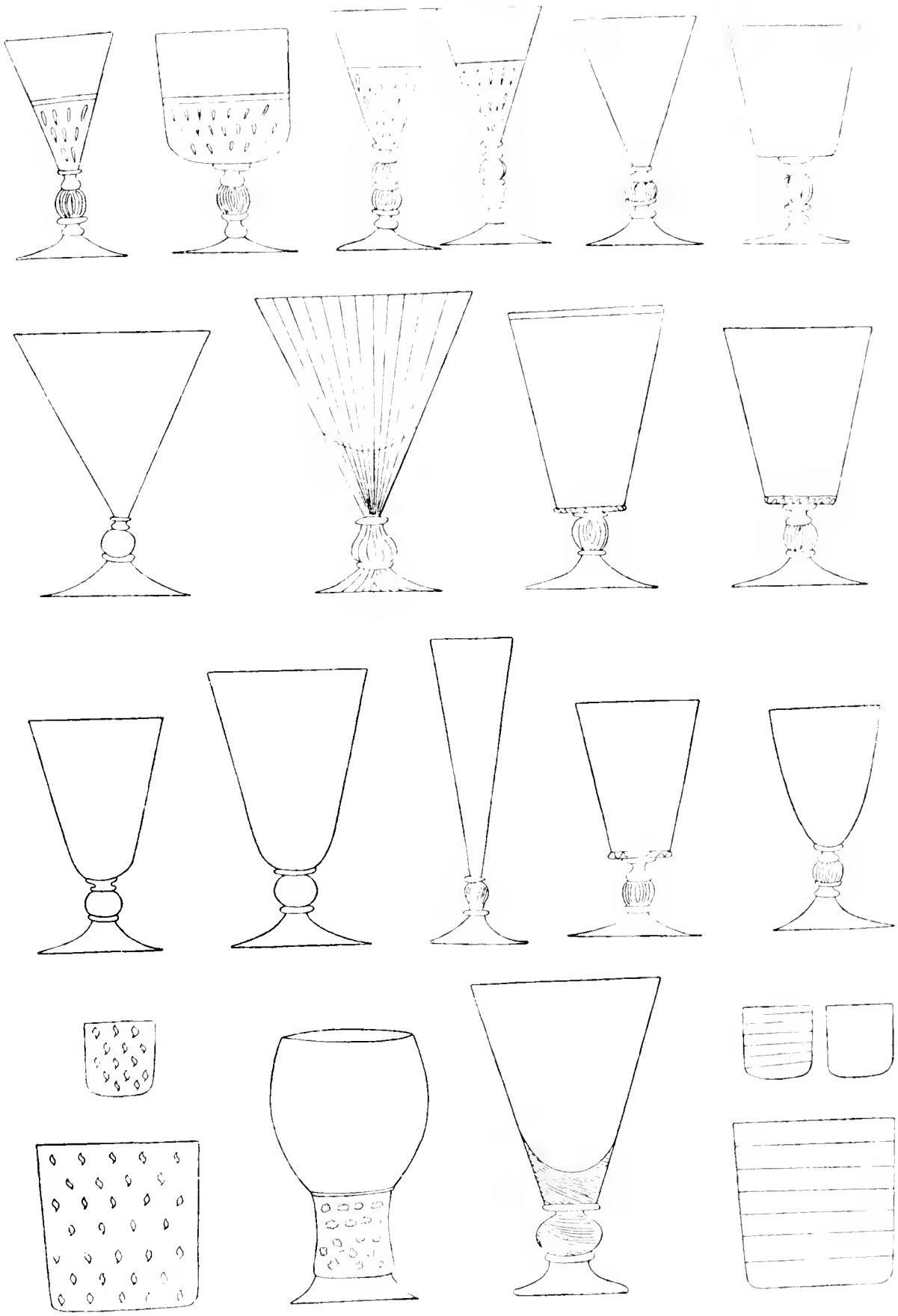
The figures shown by the outlines divide themselves naturally into Wine

[1] On one occasion only, namely, in the list sent in the letter of 18th January 1671, Greene mentions flint glass in the order for two dozen "flintt sack." If he used the word in its original sense, it is difficult to explain why he mentioned it at all, because Neri tells us that the Venetians were then using *tarso* or flint, instead of sand, for crystal glass. It is just possible that "flint" is a clerical error for *fluitt*. An outline of a "flûte," 6½ inches high, occurs among Greene's "forms," but not marked as to quantity required. It is doubtful if "flûtes" were ever used for sack.

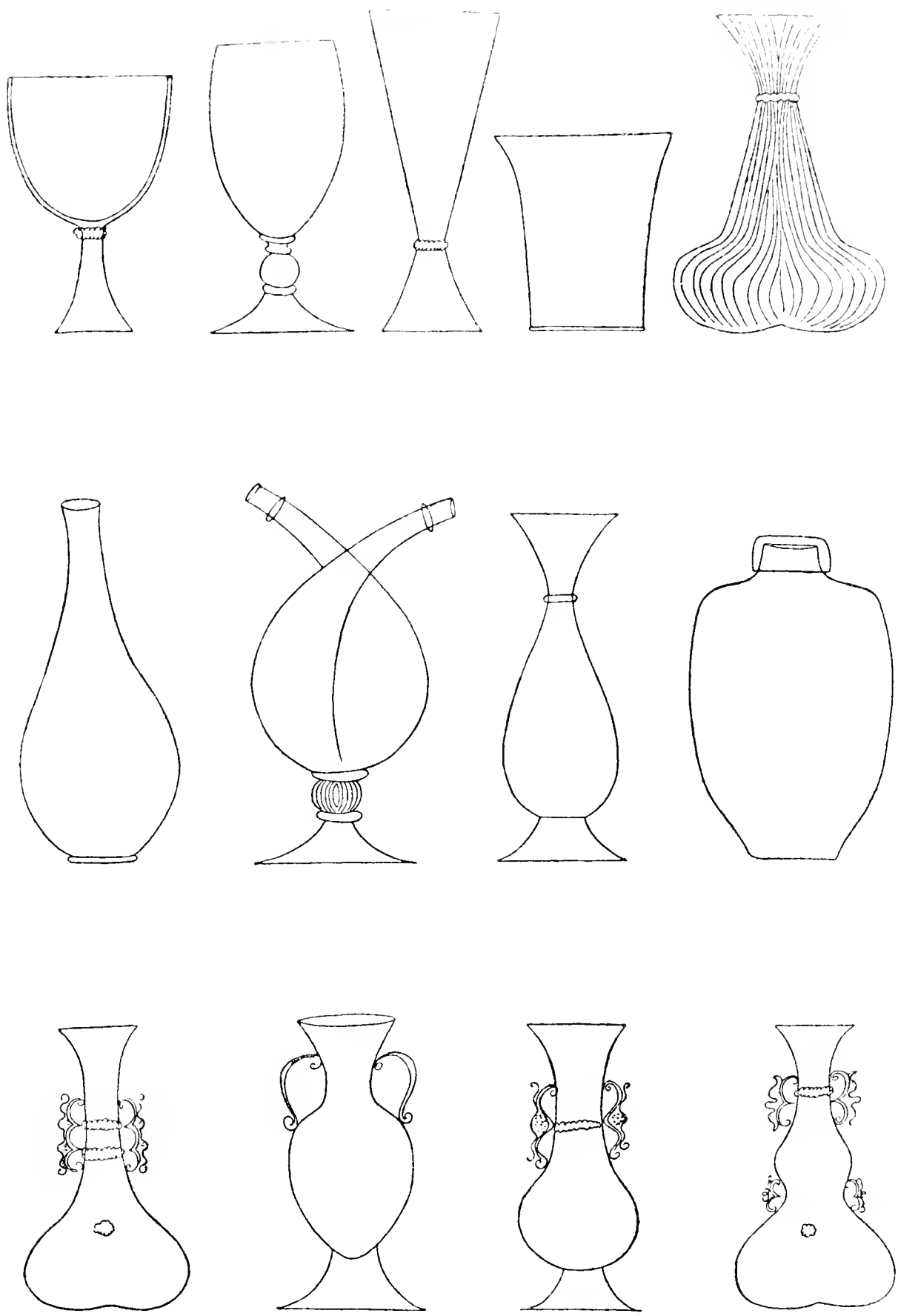
Glasses, Beer Glasses, and Sundry Glass Vessels for drinking and other purposes. The wine-glasses vary in their cups or bowls from the pure funnel shape, which never has a cover, to the rounded and flat-bottomed form. Sufficient diversity in the designs of the stems is obtained by the ingenious manipulation of a few simple mouldings and a "button" or knop. The largest sizes are inscribed for French wine and sack, covered and uncovered, plain or "ribbed," with plain or fluted buttons in the stems. The smaller glasses are marked for Spanish wine, French wine, and sack; they are very rarely covered, and never ribbed. Smallest and most interesting of all are the speckled enamelled glasses for Spanish wine only; these are never covered, and the stems are decorated with one or two ribbed buttons. They are enumerated by Greene in his list for 28th August 1668. One glass of this group more capacious than the rest indicates that Greene had noticed the shape of at least one of the Duke of Buckingham's Venetian glasses exemplified in the Royal Oak cup. This seems to be of English fashion. Roemers, never popular here, are only twice illustrated as "rñish wine-glasses"; four dozen only of the larger size were ordered 10th February 167$\frac{9}{1}$. Speckled, ribbed, round-bottomed, and plain tumblers are also shown for claret and sack, and minute tumblers for strong waters of similar kinds are described under the same date as "brandj tumblers." Though the wine-glasses, covered and uncovered, are generally smaller than those for beer, it is remarkable how capacious the greater number of them are, and how much the habit was used of drinking wine from tumblers. In any recognition of wine-glasses of this period the covers belonging to them must not be overlooked; they should be easily distinguished by their plain "ring" handles.

The beer glasses proper may be collectively described as larger versions of those for wine, and they include heavier and more ample vessels of another class. Some with funnel-shaped bowls are thus particularised on the drawings: "The lower partt of these glasses and the buttons must be solid mettall and all Ye Rest of ye glasse I woud have to be blowne thicker then usealj especullj Ye feett must be strong." The same were provided for French wine, and still more solid varieties also ordered, all probably for use in ordinaries. The beer tumblers are repetitions of those for wine (Plate 30).

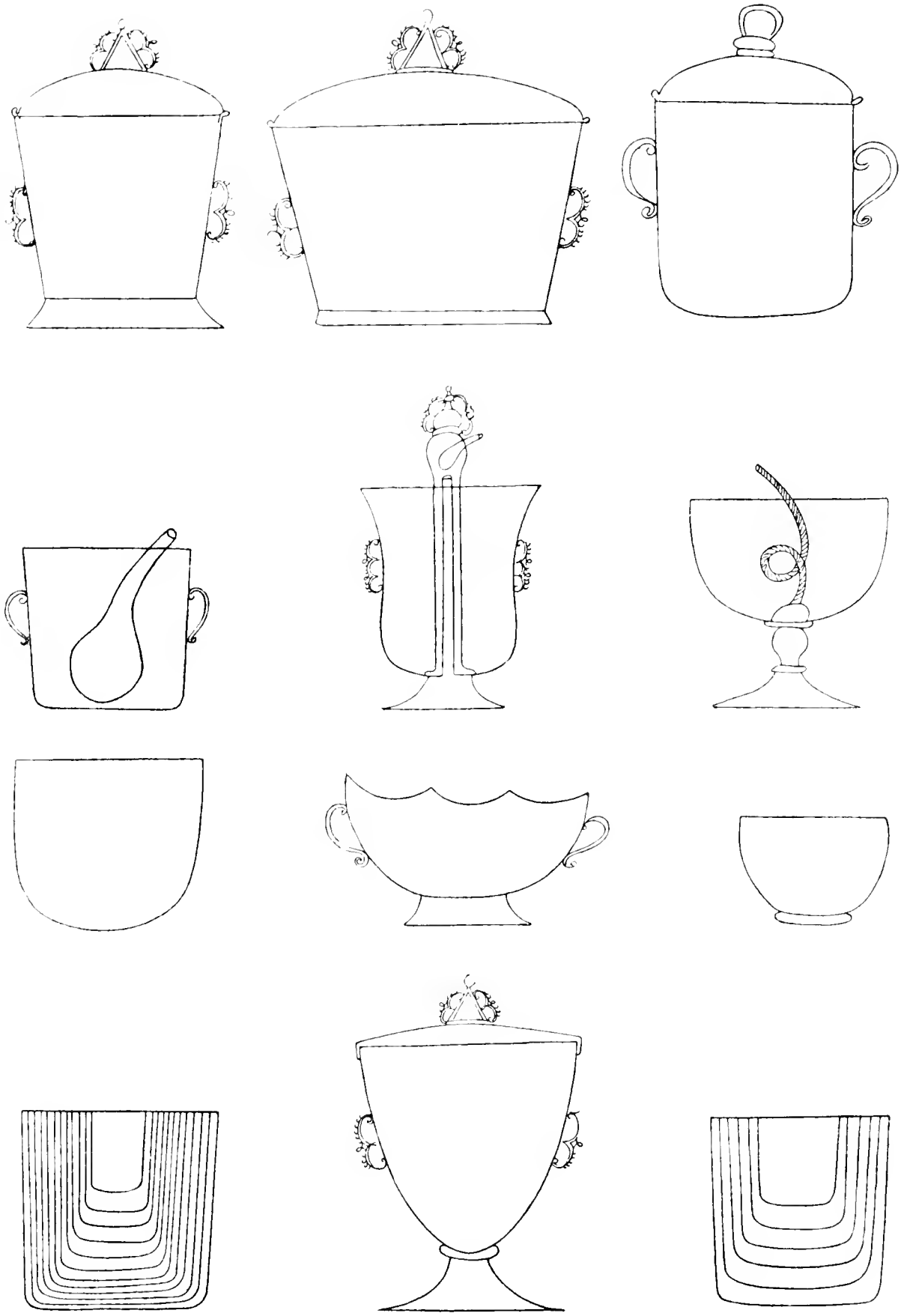
Among the sundry glass vessels depicted by Greene the covered pots for beer or wine, porringers or posnets, in two sizes, with ears or handles, are most conspicuous. They were necessary concessions to the English taste in the days of the Merry Monarch with the sardonic countenance, and their capacity must have sorely puzzled the abstemious Venetians. Then come the fountain pots for



30.—VENETIAN GLASS.



31.—VENETIAN GLASS.



32.—VENETIAN GLASS.

refreshment by suction, the "spout pots" for the same service by old people and invalids, recalling the examples in silver of somewhat later date, and the round-bottomed tumblers and footed bowls of which the shape had been handed down from early times by the silver "bolles" and "mazers" of mediaeval inventories. Similarly, sets of six and twelve "glasses in a neast verj well fitted" had their types in nests of silver bowls of earlier days,[1] and their prototypes in the Roman covered bronze boxes of weights (Plate 31). Covered cups, chalice-fashion, for use indifferently for beer or wine are also shown, and "beakers" and "flouer pott glasses" drawn, and ordered 10th February 1670.[2] There remain to be noticed the "clouded Calsedonia," the "speckled enameld," and the "milke whit" cruets with and without feet, and the single, the ribbed, and the gimmal flasks (Plate 32).

With respect to the more ornamental of the above-mentioned objects it may be readily gathered that however much Greene insisted that his designs for the usual glasses suited to the English taste should be carried out—he gave no orders without sending a "form" marked with the quantity he wanted—he adopted the better plan respecting the decorative details of handles, ears, etc., of other vessels, of only rudely suggesting what was beyond his power to draw, and adding by letter that they were to be "of good hansom fashions." The ornamentally pinched, denticulated, and other artistic work was therefore a free rendering of Greene's pen-and-ink crudities by long descended artists practising the traditional methods of work in the manner for which their material was best suited. Evidence of this will be shown presently.

Considering the large number of glasses made in Venice to the orders of Greene and other glass-sellers, and the solid character of the greater part of them, it is somewhat surprising how few have survived to the present day; but two centuries and a quarter is a long period for the duration of glass vessels liable for ordinary use, and not made for ornament. At about this point the limit of lasting seems to be reached, for no example of Mansel's glasses—not even a tiny mortar glass—known with certainty as such, appears to have escaped destruction.[3]

[1] Archbishop Parker, 1577, had a "neste of boules pounced with a cover" weighing lxiiij ounces. —*Archaeologia*, vol. xxx. p. 26. Sir William More, 1558, had one, parcel gilt, and weighing lxxxij ounces, and two other sets.—*Ibid.*, vol. xxxvi. p. 293.

[2] Flower-pot glasses and footed bowls in chalcedony or schmelz are made at the present day at Barcelona, where glass has been fabricated from time immemorial, of exactly the same shapes as shown in Greene's designs. Such a survival is to be looked for in an unchanging country like Spain.

[3] In consequence of the persistence of traditional types in Venetian glasses, their dates are often uncertain, and it is probable that the greater number that have survived are of the latter rather than of the earlier part of the seventeenth century. This view is, of course, apart from the consideration of those rare late Gothic vessels of which the dates are well ascertained from their character and

With regard to Greene's actual glasses it will be convenient to notice them, together with those presumably of his contemporaries from the same source as well as the English-made examples of the same period. A glass in the cabinet of the author corresponds so nearly with one of Greene's "forms" that it cannot be

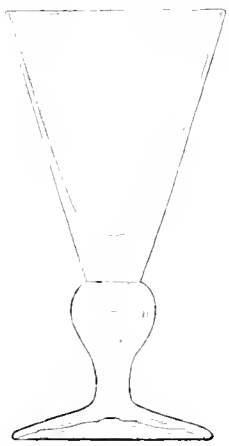


FIG. 159. (One third.)

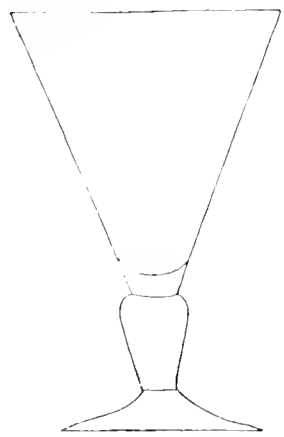


FIG. 160. (One third.)

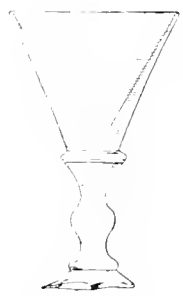


FIG. 161. (One third.)

mistaken. It is, moreover, of a glistering cold white metal, with but a moderate ring. Both the glass and the "form" are here illustrated (Figs. 159, 160). A glass of a small capacity in the museum of Mr. H. Syer Cuming, dug up at London Wall in 1886, inscribed on the bowl with a diamond point, "Garrett, Cock, Old Street" (Fig. 161), has the same qualities of metal, and though not recognisable from the drawings as one of Greene's glasses, it may be safely

FIG. 162. (One third.)

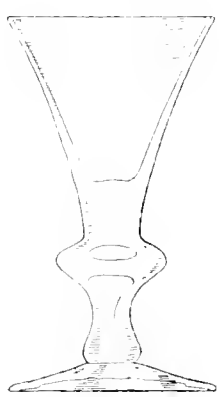


FIG. 163. (One third.)

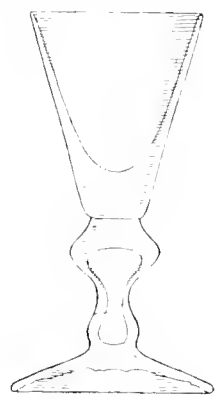


FIG. 164. (One third.)

attributed to the design and order from Venice of another London glass-seller of the time, Sadler, Allen, or Van Mildert, alluded to in his letters. Of similar origin may be a glass of larger size, with a round-bottomed bowl, in the collection of the same accomplished antiquary, found at St. Bartholomew's, Smithfield, in 1867 (Fig. 162). It fulfils the identical conditions as to character of metal, as does also an excellent example in the possession of Mr. J. W. Singer, as well as a

decorative features, and of the very frail and beauteous objects *à priori* for the adornment of cabinets, and not for use, which have almost miraculously been preserved.

like glass in the author's hands (Figs. 163, 164); modifications of this shape were produced long after in Germany and the Low Countries.[1] No example of Greene's flat-bottomed glasses for wine or beer has come under observation at the present day to the best of the author's knowledge, though a few must exist and should be looked for by collectors.

Inasmuch as the English and Venetian glasses were at this time in competition to suit the national taste and requirements, we should expect to find some similarity in the rival designs. Such is, in fact, the case; but while the variations in form are but slight, the quality of the metal offers a good criterion of the difference between them. Thus the cold and soft white glass from Venice is at once distinguishable from that of English make with its deeper tint, greater brilliancy, and weight. This is a distinction drawn by an amateur; possible chemical differences in the metal would be more difficult to point out and of less general utility to the collector. In the glasses from both sources the folded foot is a constant feature.

The English glasses of this time, and deriving directly from it, may be accurately spoken of, without disparagement of their historical value, as more clumsy and solid than their heavy and anomalous Venetian-made rivals. It is doubtful whether any of these that have come under the author's notice are earlier than 1680. The thick and lumpy baluster and moulded stems, so far removed from normal Venetian traditions, are rarely without large and often misshapen bubbles; these are not due to accident, but are genuine features specially introduced with a somewhat primitive idea of ornamentation. Some remarkably large vessels of this time, and rather later, have been preserved. Such are Mrs. Beatty-Pownall's monumental glass, 16 inches high, accidentally of good design (Fig. 165), and one of the normal form in the possession of Mrs. William Wilmer, $11\frac{3}{4}$ inches high. A smaller glass of like kind is in Mr. P. H. Bate's collection (Fig. 166). Mrs. Shirley Harris is the owner of a glass of the same character, $8\frac{1}{2}$ inches high, with a pedigree which takes it back to the early years of the last century (Fig. 167).[2]

[1] Care must be taken by the amateur not to confound them with glasses of German make, of about a century later, from Zechlin in Brandenburg, Carlshafen am Weser in Hesse Cassel, Luissart, and from glass-houses in the forest between Bavaria and Bohemia. These differ in the quality of the metal from English examples, but could easily be mistaken in this respect for Venetian make. The German metal has more glitter. They frequently have beads in the base of the bowl, which joins the stem with an ogee line, and the feet are always domed and folded. Some examples in the collections of Miss C. M. Hartshorne, Mr. B. F. Hartshorne, and the author, have gilt edges, and the lion rampant of Hesse Cassel engraved beneath the foot, and C for Carlshafen.

[2] A tradition has been transmitted with the pedigree, to the effect that the glass was used as

A considerable number of the glasses of medium capacity, of English make, with queer heavily-moulded stems, of the last years of the seventeenth century and onwards, for wine, and of smaller sizes for the developing taste for strong waters, have been preserved; and though their period is unmistakable, and the

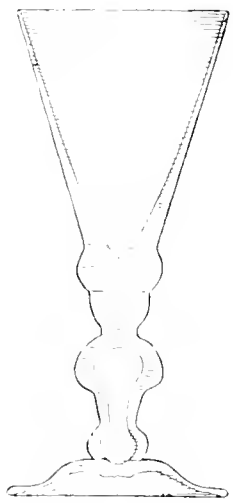


FIG. 165. (One sixth.)

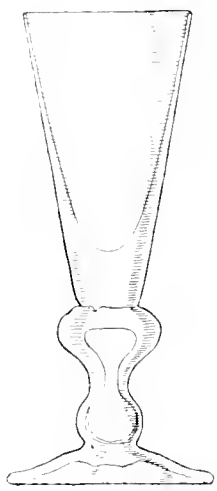


FIG. 166. (One third.)

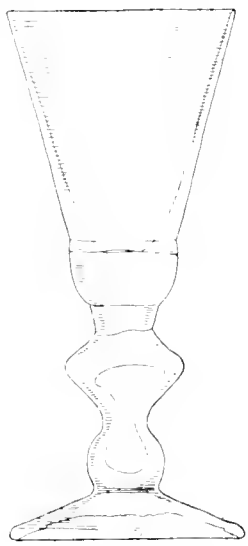


FIG. 167. (One third.)

duration of their production not long—for they were the precursors of a lengthy series and soon lapsed into simplicity—they have been neglected by collectors, owing to lack of knowledge regarding them, in favour of later glasses of more artistic merit; as with the Venice-made examples, the folded foot is an almost

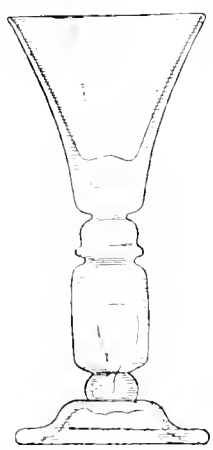


FIG. 168. (One third.)

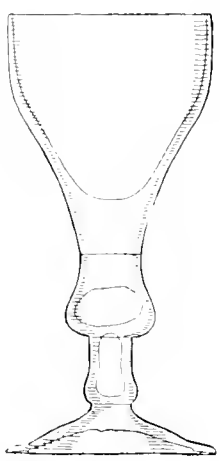


FIG. 169. (One third.)

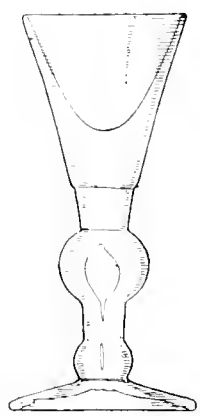


FIG. 170. (One third.)

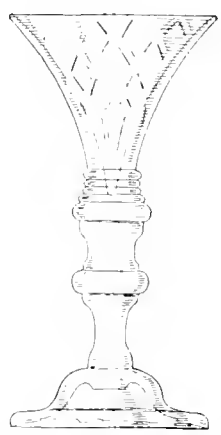


FIG. 171. (One third.)

invariable feature of the English glasses of this time, but many of them are so odd that they do not lend themselves readily to classification (Figs. 168-170). Certain rare and heavy wine-glasses, with deeply pressed funnel-shaped bowls, folded feet similarly treated, and moulded stems, belong also to this series

a chalice, apparently in a Staffordshire parish, in unhappy Puritan times, when the sacred silver vessel had been hidden for safety. The character of the glass dispels the picturesque record, but it has interest of its own.

(Fig. 171). They must not be mistaken for so-called sweetmeat glasses, which are much later in date and will be spoken of in their place.

There can be little doubt that the hollow "blows" in the stems of the larger glasses first led to the fashion in England of enshrining a silver coin in them. Unfortunately the piece of money cannot be depended upon as supplying the date of the glass; such reliance would imply that the glasses were only made in the actual years of new issues, which is improbable. The coins are, therefore, in most cases misleading. But, inasmuch as the greater number of those which appear in the stems of glasses are of Charles II., it may be reasonably concluded that some of them were patriotically so enclosed in the King's honour during his life-time, and others out of respect for his memory some few years after his death. It is to be noticed in both regards that all are good broad coins, chosen out of the millions of clipped money which became so serious an inconvenience soon after the death of Charles II.; the above conclusions are also borne out by the character of the glasses themselves in which coins of Charles II. occur. At first the roomy bulbs of large goblets only were enlarged and so furnished. A glass in the possession of Mrs. Schreiber has a shilling of Queen Anne in the bulb, and a Maundy fourpenny piece in the knop of the cover, which is surmounted by a bust in "a Hat that was shaped in the Ramillie Cock," probably intended for Prince Eugène. Both bulbs are decorated with strawberries. Before the second decade of the eighteenth century the stems of many medium-sized wine-glasses were systematically fashioned with a neat receptacle for the money, at once enhancing the appearance and giving the glass an interest, but not of the highest kind. Examples of old coin-glasses are now of infrequent occurrence.[1]

Of the sundry glass vessels of the time of Charles II. very few have survived. A flask, apparently of this period, $4\frac{3}{4}$ inches high, in the usual cold white glass, and decorated with A H in pinched work, small strawberries,

[1] It was the custom in Murano to enclose certain medals in the bottoms of glasses for presentation to distinguished visitors. In the British Museum is a Venetian glass containing a half sequin of Francesco Molino, elected Doge in 1647; an English glass of about 1740 with a threepenny piece of 1679; and another enclosing a Dutch coin of 1739, the probable date of the glass. In the same collection is a Venetian glass containing a die in white paste. Coins were also inserted in the bottoms of glass jugs, and the practice was revived on the occasion of Her Gracious Majesty's Jubilee in 1887. In the Germanisches Museum at Nuremberg are five fluted Bohemian tumblers, $3\frac{1}{2}$ inches high, of the end of the last century, decorated with gilding in arabesques. In the false bottom of each three ivory dice are enshrined by means of a separate disk of glass fixed with cement. Thus the cost of the liquor could be thrown for without the help of the leather *würfelbecher* so dear to Heidelberg students. Four remarkable bronze dice were found in 1849 in a tomb at Marseilles, apparently Roman. They are in the form of a human figure seated with the arms akimbo, the pips, from one to six, being disposed on different parts of the body, and formed by indents to be filled with a pigment.—*Proceedings, Society of Antiquaries*, vol. ii. p. 18, with illustrations.

and denticulated strips, is in the cabinet of the author (Fig. 172). Modifications of this latter ornament are variously styled frilling, quilling, and purfling, the last being the term usually applied to the trimming of garments for the dead. A posset pot, belonging to Miss Whitmore Jones, is preserved in her beautiful ancestral house of Chastleton (Plate 33). This cup may well be an improved Venetian rendering of a design transmitted from England, the heraldic Stuart roses being concessions to English traditions; it is doubtful if masks

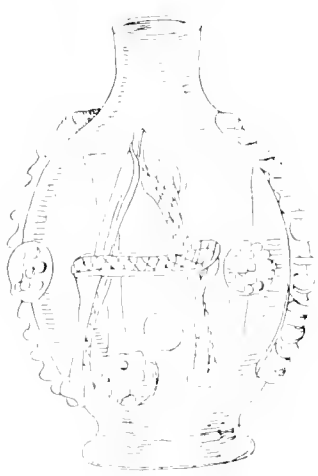


Fig. 172. (One half.)

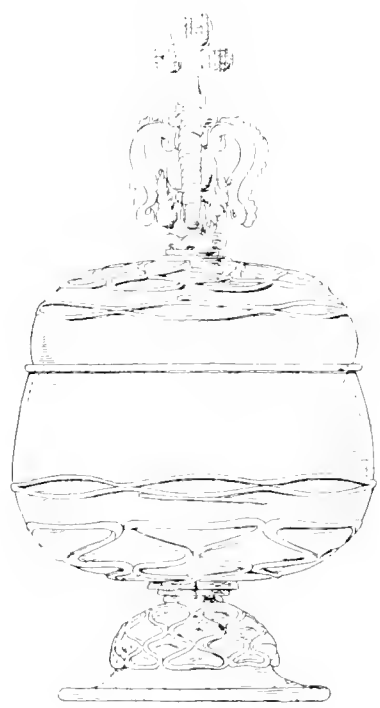
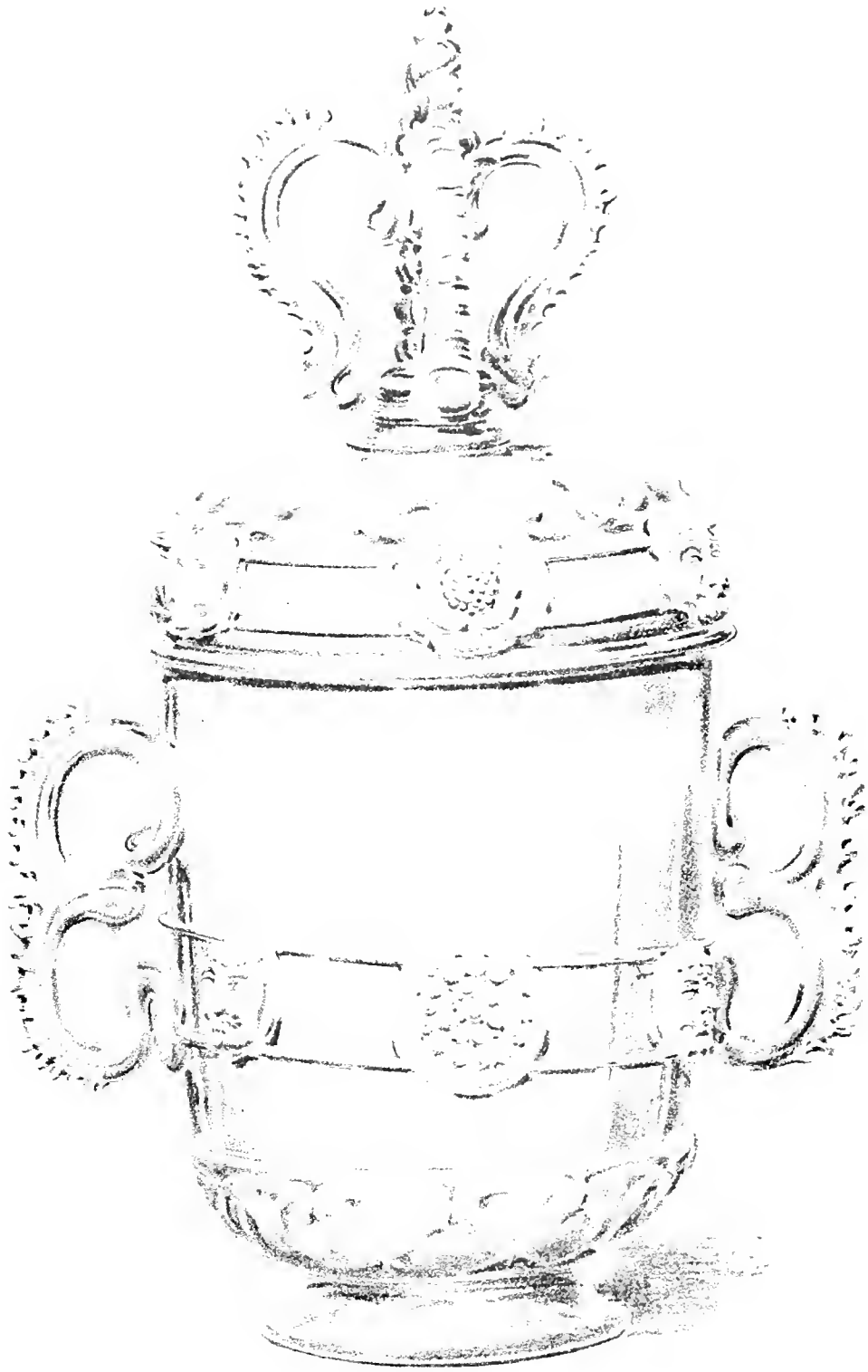


Fig. 173. (One quarter.)

were ever impressed upon glasses made here. A very similar posnet is in the collection of Mr. H. Stear, and a large covered punch-bowl, with moulded and trailed decorations, of somewhat later date is, in the cabinet of the author, and came through an alliance with a Yorkshire family sixty years ago, with a history that takes it back to the early years of the last century (Fig. 173). All these vessels have folded feet. It is regrettable that no examples of the glasses, tumblers, or cruets in chalcedony, spotted enamel, or milk white appear to have survived. A large and a small horizontally-ribbed tumbler were obtained by the author from a stall in Nottingham Market in 1891; a second small one, $2\frac{7}{8}$ inches high, came from a cottage in Bradbourne; and a third, still smaller, is in the possession of Mr. W. Winckley.[1] The character of these glasses may seem to show them to be members of Venetian-made nests,

[1] Formerly belonging to Mr. William Plank of Harrow, who died 20th November 1867, aged a hundred years and twelve days.



33.—VENETIAN GLASS—"FACON D'ANGLETERRE."

such as are set forth in Greene's drawings, but it is possible that they are later than his time. The sloping sides suggest this doubt.[1]

The value of Greene's drawings as dated representations of the generality of the glasses used in England during the last quarter of the seventeenth century, together with their verification by existing examples, will be obvious to artists, collectors, and other persons interested in the minor English arts.

John Greene, citizen and glass-seller in the Poultry, appears to have been connected with the glass business all his life.[2] An active member of the Glass Sellers' Company, he was constituted an Assistant in the Charter of 1664, and elected one of the Wardens in 1677; he was Treasurer of the Feast of the Sons of the Clergy in 1689. Beyond these facts we know no more of him and his commercial dealings and probity than is revealed by his Letters, and the Papers[3] which have been preserved with them. He used a seal with the arms of Greene of Greene's Norton, Northamptonshire, formerly De Buckton, (Az), 3 bucks trippant (Or), a distinguished family allied with some of the bluest mediaeval blood in England.[4]

[1] Sir Francis Boileau has a nest of engraved Dutch glasses. In the Germanisches Museum at Nuremberg are two imperfect nests of six, the largest glasses being 3 and $2\frac{3}{4}$ inches high, respectively. In the one example, counting from the centre, Nos. 1, 2, and 4, and in the latter Nos. 2 and 3 are missing. They are closely fitted, and belong to the early years of the eighteenth century; the glass is thick and dull. Nests of silver bowls, with a cover to the largest to keep them together, occur sometimes in inventories. Sir William More had three nests in 1558, two with covers.—*Archaeologia*, vol. xxxvi. p. 293. Sets of silver bowls or "tumblers," all of the same size, as contradistinguished from nests, are not uncommon of a later period.

[2] See p. 192.

[3] Appendix, Original Documents, Nos. XXIX., XXX., XXXI.

[4] One of the saddest passages of Northamptonshire history is the shocking maltreatment which the tombs, effigies, and brasses of the Greenes in Greene's Norton Church have suffered, principally in 1826, at the hands of their legal custodians. The earliest description of them is in *Halstead's Genealogies*—rarest of printed books.

CHAPTER XIII.

SOURCES OF INFORMATION—PATENTS CONTINUED—RAVENSCROFT—RE-INTRODUCTION OF FLINT AND PEBBLES IN FLINT GLASS—GLASS OF LEAD—GLASS HAWKERS FROM THE COUNTRY—HOUGHTON'S LIST OF GLASS-HOUSES, 1696—GLASSES OF THE TIME OF WILLIAM III.—PATENTS CONTINUED—RUBY GLASS—OPPENHEIM'S SPECIFICATION FOR FLINT GLASS—FURTHER PATENTS—ENGLISH GLASS IN FRANCE.

HITHERTO the main history has been drawn from documents, in the absence of the glasses to which they relate. With the end of the seventeenth century the turning-point is reached and the sources of information are reversed. The glasses increase, and the documents diminish both in number and consequence, and shortly disappear altogether, so that long before the middle of the eighteenth century the story will be disentangled by the evidence of the glasses alone. But if there has been some difficulty on account of the paucity or even total absence of examples, when endeavouring to track the English glasses through Gothic ages and Renaissance times, it does not follow that trouble will be at once smoothed away when we enter finally into the open. For the number of types of glasses which present themselves for consideration during the course of the eighteenth century, and the multitude of examples with minute variations illustrating them, induce at first sight the semblance of chaos. This seeming perplexity we shall presently proceed to bring into order, with such classification and nomenclature as the dates and the shapes of the glasses appear to suggest and permit.

Continuing the story of glass-making from Patents and documents, we find that on 16th May 1674 George Ravenscroft obtained a Patent for seven years for the "Art and Manufacture of a perticuler sort of Christaline Glasse resembling Rock Christall, not formerly exercised or vsed in this our Kingdome," with special protection against imitators.[1] The remarkable feature of this business is

[1] Appendix, Original Documents, No. XXXII.

that the invention was brought here by an Altarist, De Costa, the only record we have of an artist from the ancient glass-making district of Montferrat working in England,[1] and the last record of an Italian master of a glass-house here. Plot, writing in 1676, says that the furnace was at Henley-on-Thames, and that it was carried on by Ravenscroft, and lately by Mr. Bishop. He also tells us that Dr. Ludwell found out by analysis what the Patent states that Ravenscroft did not divulge, namely, that the constituents of the frit were to a pound each of the blackest flints calcined, "about two ounces of Niter Tartar and Borax." But the glasses thus made being subject to the fault of "Crizzeling," or a clouding of their transparency—a trouble often noticed in glasses of the period in question, both Venetian and English—Tarso, or white pebbles for use instead of flints were imported from the River Po, with which, and some alteration not specified, in the proportions of the other ingredients, far superior and whiter glasses were made than any from Venice; these would not "crizzel," and were distinguished from the others by a seal set upon them. The sealing of each piece rather implies a limited manufacture of choice objects. None of these sealed Ravenscroft-Costa glasses have been recognised at the present day.[2] Plot goes on to say that the improvement lay not in the substitution of pebbles for flints, "but in the abatement of the salts for there are some of the flint glasses strictly so called which have stood all tests."[3] His History was published in 1676, and when he wrote the above remarks as to flint glasses "strictly so called," it is apparent that he thus distinguished it from the new glass then being introduced under Tilson's Patent, and carried without delay into the Low Countries,[1] and also called "flint glass," though not made from flints.

The glass-house at Henley-on-Thames was a venture of the Glass Sellers'

[1] See Introductory Notices, pp. 33, 100.

[2] The practice of impressing upon bottles and other glass vessels the initials, name, or mark of the maker was of Phoenician origin, and again became common, after centuries of disuse, throughout the seventeenth and eighteenth centuries, when the arms, crest, or initials of owners were often stamped upon bottles. Wine-flasks of the last century sealed with the figure of St. Cornelius, for the ancient ecclesiastical foundation of Corneli-Münster, near Aix-la-Chapelle, also called Pruyn, are preserved in the Musée Archéologique at Liège. In the cabinet of the author is a bottle of the *bouteil* form sealed with the crest of the knightly family of Hunloke of Wingerworth, Derbyshire, circumscribed by the legend:—WINGERWORTH, 1711. In the same collection is a straight-sided wine-glass, with an opaque twisted stem, about 1735, twice sealed on the bowl with the arms—a fesse between three garbs, in an arabesque border. This is the solitary example of a sealed wine-glass that has been noticed by the author. See Group VII., Fig. 219.

[3] See Appendix, Original Documents, No. XXXII., footnote.

In a discussion at the Royal Society it was stated that the Italian had made a mistake in using flint instead of *tarso*, because it made the glasses fly. This was a worse fault than "crizzeling." —See Birch, *History of the Royal Society*, vol. iv. p. 276.

[1] See Introductory Notices, p. 40.

Company, which took all that was produced, and whose clerk, Samuel Moore, furnished "the sizes and fashions."[1] On 18th September 1675 the Company gave leave to Ravenscroft to transport to Ireland or elsewhere beyond sea £400 worth of his "fflint Glasses" made within a certain period, but not to send it in future to Scotland, or any place in England and Wales.[2] Ravenscroft's manufacture was evidently designed to combat the flint glasses "strictly so called" imported from Venice; but it was a retrograde movement, and probably the last serious attempt in England to make glasses with flints. The fact of the Glass Sellers' Company taking all that was made looks as if the production was not considerable, owing to the difficulty and cost of preparing the flints for use, or the expense of bringing pebbles from the Po; in either case the result must have been the best metal then made. It was probably work from the Henley furnace previous to Ravenscroft's Patent, and from one in the Savoy, also in the hands of the Company, which Greene had in his mind when he warned Morelli on 3rd May 1671 of the goodness of the English glasses.

On 3rd June 1685 the Company, who heretofore had sold fifteen to the dozen of all sorts of glasses, considered that it was a prejudice to themselves as partners in the Henley glass-house that other makers sold eighteen to the dozen "of their glasses called fflint glasses," and that in future Hawley Bishop, Ravenscroft's successor, should deliver to them sixteen to the dozen.[3] It is not certain that the glass-house at Henley was at this date, four years after the expiration of Ravenscroft's patent, still using flints, or pebbles, and making flint glass "strictly so called," but it is almost certain that no other English glass-house was then doing so; the transference by "the trade" of the term to the rising "glass of lead" would therefore be an important item in tracing its progress.[4]

In 1688 much concern arose with the Glass Sellers' Company in consequence of the great influx of country-made glasses to London, causing the establishment of traffic in them by members of the Company, as well as by men newly set up for that purpose. This had been resented by the Court of Assistants, under threat of depriving such dealers of any glass from the other members of the

[1] Appendix, Original Documents, No. XXXI., (2).

[2] *Ibid.* (3).

[3] *Ibid.* (8).

[4] "When the king came in (*i.e.* 1660) we bought our looking-glasses and in a great measure our drinking glasses from Venice, but now by the fashion of using glasses in coaches, and other good means we easily enough serve our neighbours."—Houghton, *Letters for the Improvement of Husbandry and Trade*, vol. ii. p. 138, edit. 1690. Thus the export trade in glass was considerable at this time, and Houghton's statement illustrates the information respecting the introduction of "flint glass," improperly so called, into the Low Countries since 1680.

Company.[1] No doubt this corporate body was wise in the action it took to endeavour to suppress the selling by shops, and hawking in the streets of London, of bad country-made glasses, besides being, as was expressed in the petition to the House of Lords, "greatly mischieved" by the itinerant pedlars. The Bill for the suppression of Hawkers and Pedlars, then before the Lords, against which the Company petitioned in 1691,[2] excluded the wandering dealers in glasses and earthenware. The Glass Sellers showed that by the statute of 39 Elizabeth, cap. 4, pedlars and chapmen were adjudged rogues and vagabonds, but that glass-men of good behaviour might travel in the country only, under a license from three justices,[3] and that this liberty for glass pedlars was repealed in 1 James I., because under its shelter rogues and vagabonds followed their calling as such. It was further pointed out that there was no need of these chapmen wandering about the country with glasses and earthenware, because those commodities were sold in all cities and towns, and almost in all villages in England. Moreover, the insolence of these illegal hawkers was dwelt upon, and the prejudicial effect upon lawful shopkeepers of their immunity, the exceeding bad quality of their wares, and their well-earned reputation as "very incorrigible and stubborn sort of persons that regard no laws." The existence of the Company of Glass Sellers being thus in hazard, it was prayed that all peddling glass and earthenware sellers be included in the new Bill, and suppressed accordingly, and subjected to the same penalties as other chapmen and women.[4]

By a letter of 4th December 1691, signed by Foot Onslow,[5] the glass-sellers were ordered to attend and be heard by the Committee as to the Hawkers' Bill. From another document it seems that the Solicitor-General, and Onslow, the Chairman of the Committee, put into the Bill the trades they thought fit, and left out the rest.[6] The glass-sellers were invited to state their case through counsel, and there is no doubt that they did so, but the documentary information now breaks off.

The improvement of flint glass being a gradual process up to the time of its perfecting just before the last quarter of the eighteenth century, it follows that, excepting Tilson's invention of 1663, which was introductory, its invention

[1] Appendix, Original Documents, No. XXXI. (10).

[2] *Ibid.* (12).

[3] See pp. 173 and 187.

[4] Appendix, Original Documents, No. XXXI. (12).

[5] *Ibid.* (13). Foot Onslow was father of Arthur Onslow, the famous Speaker of the House of Commons, from January 1728 to March 1761.

[6] *Ibid.* (14).

could never have formed the subject of a Patent. Like Greek art or Gothic architecture it grew by degrees; improvement was, however, already rapid in the last decade of the seventeenth century as the glasses show.

In 1691 Robert Hookes and Christopher Dodsworth had a Patent for "A way of mixing metall so as to make glasse for windows of more lustre and beauty then any that have been heretofore made in England, and to make red chrystal glasse of all sorts and likewise the art of casting glasse and particularly looking glasse plates much larger than ever was blowne in England or in any Foreign parts." This was therefore an improvement in the management of the materials; it was a distinct advance, but whether in the preliminary fritting or calcination, or by the substitution of direct fusion with purification of the metal by ladling it into water, as commonly now practised, is a matter of practical detail which need not be speculated upon, and, indeed, cannot be discussed here.

On account of the double meaning which the expression "flint glass" may convey, scientific literature of the time under consideration generally leads to no definite conclusion with regard to details of manufacture. Houghton says, writing in 1696, that he remembers when "Mr. Ravenscroft first made the flint glasses." This process was in the beginning a hopeful re-introduction, and the Po-pebble glass seems to have been the best then produced; but it was too expensive and must have been abandoned some years before 1696; in fact, if it had not been discarded, we should be placed in the dilemma of having at the very end of the seventeenth century two kinds of flint glass—that properly so-called, good in quality but small in quantity, retrogressive in character, and dear, and "glass of lead," to which the term was now, as by common consent, but improperly, coming to be applied.

Houghton, in his List of Glass-Houses in 1696, a valuable table showing the enormous increase in glass-making in England, gives a total of eighty-eight furnaces, of which twenty-seven made flint glass. He says that for making the best flint glass—or, as he also calls it, the best crystal glass—white sand is used instead of powdered flint, and well-purified potash. He adds that, "according to my information we are of late greatly improved in the art of glass making for I remember the time when the Duke of Buckingham first encouraged glass plates and Mr. Ravenscroft first made the flint glasses. Since then we have mended our window glass and outdo all abroad." He states further that large sums had been spent upon the improvement.[1] This can only refer to the

[1] Appendix, Original Documents, No. XXXIII.

34.—ENGLISH GLASS.

advance which the manufacture of "glass of lead" had made during the last years of the seventeenth century.

With final reference to the glasses of the last twenty years of the seventeenth century, they are modified and improved versions of those of the time of Charles II., and there is some reason for believing that many Dutch glasses were introduced into England on the accession of William III. At this time also we first meet with glasses with stems with incised spiral lines at wide intervals on them, the precursors of the twisted stems proper. Such a glass is in the collection formed by the late Marchioness Dowager of Huntly; it is engraved with the diamond point, on one side with the royal arms crowned, within a garter, with supporters, and on the other with "God Bless King Willijam" (Plate 34). On the upper side of the foot are two roses on stalks, heraldically known as roses of England. The character and history of the glass make it probable that it is English, but very likely engraved by a Dutchman.[1] A glass with precisely the same stem, and with moulded and trailed decorations, is in the possession of Sir Charles Rich. In the bottom of the bowl a sixpence of William and Mary, dated 1691, is enclosed. A belated example of a large goblet of the style of those of Charles II.'s time, with a shilling of William III. enshrined in the stem, is preserved in the Museum of Practical Geology (Fig. 174); another of the time of William III., with a sixpence of Charles II. in the stem, is in the collection of Mr. J. Moore. These sufficiently show the change that was taking place; a good example of a transitional glass is in the cabinet of the author. As to the smaller glasses of William III.'s time with heavily moulded stems—that is to say, with many mouldings, not cast in a mould—(Fig. 175) it is probable that they lost some of their solid grotesque character soon after the end of the century. Their continuation will be treated of under Tavern and Household Glasses.

FIG. 174. (One third.)

The eighteenth century opened with Patents for improvements in the furnaces, and in the materials for making looking-glass plates for panels for rooms and chimney-pieces.[2] For these purposes were the Patents of 1700, granted to

[1] On an old paper document belonging to the glass is the following:—"The Rev. Mr. Stephen Fornacer, father of Charles Fornacer, Esq., had this glass blown in commemoration of King William the third's landing in England in the year 1689, and carried it twice to Virginia and back again."

[2] Excellent examples of shaped and chamfered chimney-piece glasses, set at an angle from the

E. Sayer, and to two Frenchmen, Dumanoir and Saint Marie. Endeavours followed to introduce into England the manufacture of ruby glass. This occasionally beautiful production is considered to have been brought to a finish by John Kunckel about 1679, in which year he became Director of the Elector of Brandenburg's glass-houses at Potsdam.[1] In the early years of the century William and Joshua Price, glass-painters, of Hatton Gardens—"the notest men for that art"—claimed to have revived glass-painting, and to have recovered the art of ruby glass, "not made in Europe for many years," as is set forth in their prospectus.[2]

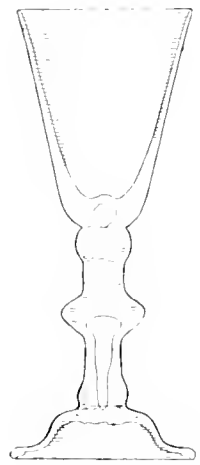


Fig. 175. (One third.)

In Houghton's List of 1696 nine glass-houses are mentioned as in and near Bristol, three of which were making flint glass. Though this is the earliest intimation we have of glass-houses in Bristol, it does not follow that there were none before this date. In 1734 Humphrey Perrott of Bristol obtained a Patent[3] for fourteen years for "his new Invention" of various improvements in furnaces for all kinds of glass, including the important one of pots with double bottoms, evidently to resist their destruction by the lead in the new process for "flint glass." The ductibility and transparency of this metal is also alluded to by Houghton as making it very proper for barometers. It will be understood that the new process was not applied to bottles and other common glass of which the colour and quality were unimportant.

In 1755 Mayer Oppenheim of London acquired a Patent for fourteen years for a new method of making red transparent glass which he had at

wall, form part of the design of the oak-panelled dining-room at Canons Ashby, Northamptonshire, the picturesque ancestral seat of Sir Henry Dryden. This beautiful room was formed by Edward Dryden between 1708 and 1710.

[1] Kunckel's glass was highly esteemed in Germany, and examples are not uncommon in cup and tumbler form, often richly mounted in silver; such as Mr. C. F. K. Mainwaring has at Oteley. But it has been much overrated, and many ruby glasses lack both brilliancy and depth of colour.—See Introductory Notices, p. 78. Ruby ruins the purple shades of red wine and is the worst colour for Sack or Rhenish, giving them a repulsive appearance, and recalling the cup of wine placed in the hand of Sir Robert Grierson of Lagg, which is said to have turned to clotted blood.—*Old Mortality*, Notes and Illustrations, vol. i. p. 407, edit. 1833.

[2] "Whereas the ancient Art of Painting and Staining Glass has been much discouraged, by reason of an Opinion generally received, That the *Red Colour* (not made in *Europe* for many years) is totally lost; These are to give Notice, that the said *Red* and all other Colours are made to as great a degree of Curiosity and Fineness as in former Ages by *William* and *Joshua Price*, Glasiers and Glass-Painters, near *Hatton-Garden* in *Holborn*, *London*; where Gentlemen may have Church-History, Coats of Arms, etc., Painted upon Glass, in what Colours they please, to as great Perfection as ever; and draws Sun-dyals on Glass, Wood, or Stone, etc."—*Original Correspondence*, 1633-1828, *ut sup.*, vol. iv. p. 318 (enclosure), in the possession of Albert Hartshorne.

[3] Appendix, Original Documents, No. XXXIV.

great cost perfected. The terms of this wordy document are precisely the same as those for Perrott, with the addition that Oppenheim is required to "particularly describe and Ascertain the Nature of his said Invention and in what Manner the Same is to be performed by an Instrument in Writing" within four months after the date of the Letters Patent, or the same shall become void. By a clerical error the final clause of Perrott's Patent, which nullifies the stipulation made with Oppenheim, as to his recording the details of his procedure, has been repeated. But this did not prevent Oppenheim from duly particularising in his specification[1] the nature of his invention. It is an important document, because it states the component parts of flint glass or glass of lead—which formed the foundation for red glass—to be at that time—

two parts of lead,
one part of sand, and
one part of saltpetre or borax ;

no other document has told us this. It will be remembered that the latter substance, also called "biborate of soda," was an item of the Ravenscroft-Costa mixture, which contained no lead.[2] Oppenheim, then of Birmingham, made further improvements in 1769 and 1770 to his already very tedious and complicated process for red glass, also styled "garnet," which colour it probably much more resembled than that of the ruby.[3]

In 1759 William Riccardo and Richard Russell, both of Whitechapel, obtained a Patent for fourteen years for a new method of making pots, and building furnaces for crown glass, plate glass, and all sorts of green glass. The exception of flint glass looks as if the proposed alterations were not suitable for the manufacture of the better kind of metal. These inventors were also called upon to deposit a specification. Other Patents were granted during the long reign of George III. for improvements in some of the materials for common glass, and for better methods of grinding and polishing

[1] Appendix, Original Documents, No. XXXV.

[2] Parker, in his *Chemical Essays*, vol. ii. p. 185, 2nd edit., 1823, gives the constituents of flint glass as—

Sand from Lynn, Maidstone, Alum Bay	3 cwt.
Red Lead . .	2 cwt.
Pearl Ash . .	1 cwt.

to which is added a very small quantity of nitre, manganese, and white arsenic. The pearl ash is carefully refined, the constituents are well mixed, and the whole combined with broken flint glass. The materials are added a few shovelfuls at a time, and the operation takes from twenty to thirty hours.

[3] *Deputy Keeper's Report*, No. 6, Appendix 2. See Introductory Notices, p. 102.

The ruby in the twisted stems of Dutch wine-glasses of the latter part of the eighteenth century, though very effective, varies greatly in its quality, and is sometimes no better than pale pink. No ruby or other coloured stemmed glass of the time ever had a folded foot.

plates and optical glasses; but none of them had any direct bearing upon the drinking-vessels. This shows that flint glass had been well established as an English industry long before the middle of the century; indeed, the glasses themselves are clear evidence of it. That the quality of flint glass gradually improved up to 1780, when the highest point of excellence was reached, is shown by the glasses of that date, and such improvements were naturally arrived at by degrees in numberless glass-houses, and from their nature were not convenient subjects for Patents.

Bose d'Antic, a French philosopher and glass-maker, and a considerable writer on the subject, states that in 1760 the English glass-makers sent four-fifths of their flint glass abroad; he alludes to the large quantity of lead then used in English glass, and its further improvement twenty years later, and he says that, in spite of its dearness and occasional imperfections and lack of transparency, the whole of France was supplied from this country with flint glass in 1760.

CHAPTER XIV.

THE GLASSES OF THE EIGHTEENTH CENTURY—TABLE EQUIPMENT—STAGES OF SOCIAL REFINEMENT—EVIDENCES FOR THE CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES—LOCALISATION OF MANUFACTURE—DIVISION BY STEMS AND UNDER SIZES—THE GREAT PUNCH PERIOD—MANNER OF ACTION—PUNCH BOWLS—LADLES—KETTLES—URNS.

The number of types of wine-glasses originated in the early years of the eighteenth century was partly in consequence of the invention of the new process of glass-making for drinking-vessels, resulting in what we now know as "flint glass," and partly brought about by the advancing requirements of society, which demanded more regular appliances and the better ordering of dinner tables, necessitating sets of glasses of various sizes—a want already recognised and partly met in Charles II.'s time—for ale, strong beer, different kinds of wine, and potent waters. The vexatious custom of "toasting" and "sentiments," also had much to say to the plenitude of the table equipage as far as glasses were concerned. To be sure, silver forks, at that time very much scarcer than spoons, were not in such profusion as at the present day, for in the early part of the century they were hurriedly washed in the dining-room in the silver cistern and fountain, for immediate re-use, and later—perhaps also with the pewter plates—in the oval mahogany brass-banded vats often met with in old-fashioned houses, and frequently now mistaken for wine-coolers. In this receptacle later on the glasses were rinsed out, in spite of the dictum of the bloods that "wine is the best liquor to wash glasses in." Glass vessels half-filled with water were finally provided for this purpose for each person at the table. Into these the glass was plunged as often as change of wine necessitated the ablution. Their use has been continued up to the present day, for the "wine coolers" with two lips, in one of which the stem of the sherry glass rests, are still to be found on the

tables of a few people who cling to the departing fashions of their fathers, and do not mind the marring of the sherry by the drop of water. Finger glasses[1] are the "heirs general" of all these washing vessels. The use of silver-gilt ewers and rose-water dishes—the successors of the mediaeval ewers and basins for dipping the fingers after dinner—is a survival from classic times which lingers in university cities and at civic feasts.

We have touched upon the table equipment in England in the later Middle Ages, and in the time of Elizabeth,[2] and we have gathered to a certain extent what the glasses of Mansel's time were like, both in his earlier and his later period, but without the aid of existing actual vessels; we know from his own statement to the Lords of (?) 1639[3] how many kinds of glasses he made in crystal, as well as in ordinary metal, and their prices about the middle of his career. Concerning the glasses of the time of Charles II. the information grows much fuller, for we have documentary evidence, a series of drawings, and many of the glasses themselves; at this time the third stage of refinement was reached. Finally, with the opening of the eighteenth century we enter upon the entirely fresh task of organising, without the help of records, an exceeding great army of items, long since disbanded and dispersed, naturally diminishing in number, liable, in fact, individually, at any moment to perish out of sight, and not until lately, save by a few persons of taste, held in any special regard as objects of historical interest.

The relative places of the glasses in the social history of the eighteenth century have now been recovered only by means of the assembling of a limited collection, and the study and comparison of nearly a thousand full-sized drawings by the author of the actual objects,[4] assisted here and there, as to some groups, by the accident of a dated example, by which accuracy of classification has become so far assured; while with regard to others, the association, already alluded to, of many of them with political movements, temporary public feeling, or special social habits, has enabled their dates to be also ascertained, usually with tolerable exactness, often with certainty. A striking feature in connection with them all is the veil of oblivion which has fallen upon them within the short time since the greater number ceased to be common objects of domestic use in England.

On the other hand, there is absolutely no information until the extreme end

[1] In Sir G. R. Sitwell's great collection of Bills they are spoken of as finger cups in 1791.

[2] Pp. 137, 208.

[3] Appendix, Original Documents, No. XXIII.

[4] The author acknowledges his obligations to a large number of friends and correspondents who have entrusted glasses to his hands for this purpose, or furnished him with graphic or other information.

of the century as to where these multitudes of glasses were made. The common ones were, of course, made, so to speak, anywhere, and slight variations in types were no doubt owing to different makers. As to those of the better sort, however, there are reasons for assigning certain forms to particular places—for instance, the fluted glasses to Bristol, some of the Jacobite air-stemmed glasses to Newcastle, and the horizontally corrugated ones to Lynn or Norwich. But the allocation of the origin of groups of special glasses—the localising of a manufacture—must always be a difficulty, yet the question of provenance is rather a minor matter for collectors compared with that of date, but the former point will be touched upon whenever circumstances seem to permit.

The glasses of the early years of the eighteenth century differ as much from those of the latter part as the habits and manners of the bygone world of the older Georges contrast with the dull and sober refinements of our own time. In going through the century, in the last period now to be dealt with, we gradually and finally take leave of the old lively and joyous society—drinking, dancing, ogling, playing quadrille; and in reviewing the glasses of a hundred years which played so large a part in that happy, careless, social period, it will be convenient to bear in mind their rough division into four more or less equal portions, corresponding naturally with the four periods of the century, the treatment of the stems of the glasses—namely, the moulded, the air-twisted, the opaque-twisted, and the cut—loosely marking such arbitrary division.

The more detailed classification into which the whole will be struck is comprised under the following heads:—

Group I. Glasses with Incised or Ribbed-twisted Stems—Waisted.
„ II. „ with Air-twisted Stems—Bell.
„ III. „ with Drawn Stems.
„ IV. „ with Baluster Stems.
„ V. „ Tavern and Household.
„ VI. „ with Opaque-twisted Stems—Bell.
„ VII. „ Straight-sided.
„ VIII. „ Ogee, Fluted Ogee, Double Ogee.
„ IX. „ Cut, and Engraved.
„ X. „ Champagne, Sweetmeat.
„ XI. „ Ale, Mead, Syllabub.
„ XII. „ Cider, Perry.
„ XIII. „ Strong Waters, Cordial Waters, Masonic, Thistle, Coaching.
„ XIV. „ Rummers, Grog, Nelson.
„ XV. „ Tumblers, Tankards, Mugs.
„ XVI. „ Flutes, Yards, Half-yards, Horns, Boots, Hats, Mortars, Salt-cellars, Girandoles.

It may be premised that while a number of different forms of glasses were made at the same time throughout the century, the duration of the various types was very unequal, so that some shapes gave way more rapidly than others, and were earlier supplanted; certain simple forms ran, with slight modifications, through the whole century, and others, again, were but temporary off-shoots soon rejoining the leading line. But in no case—such is, indeed, the natural course of all art objects—did one style suddenly come to an end and perish, to be at once replaced by something quite different. There was continued forward movement throughout the century;—like the language of "the Struldbrugs" the glasses were always "upon the flux,"[1] and the transitions being spontaneous were also gradual, and styles overlapped in glasses just as they did in all other works of art, and had their natural and legitimate sequence almost until the dreadful day of "art revivals" and "art manufacturers" arrived, and art chaos with a legacy to posterity of objects which one cannot think of with any sort of moderation.

It must be also stated at the outset that the various types of glasses which will now come under consideration, whether with moulded, air-twisted, opaque-twisted, or cut stems, and with engraved or plain bowls, were, for the most part, the better kind for the table, as distinguished from the simpler representatives for tavern or ordinary household use which will, however, also be touched upon.

The whole of the glasses of the eighteenth century must obviously be divided into three sizes—the largest for beer, or other ample drinks, the medium sizes for wine and punch, and the smallest for ardent or cordial waters. With this somewhat arbitrary division however, brought about by the nature of the objects, wonder must be sometimes excited at the great capacity of some of the larger glasses, the smallness of many of those for wine and punch, and the very limited room of a large number of the ardent and cordial water glasses.

The wine-glasses of the eighteenth century were, indeed, much smaller than in the time of Charles II., and this must be explained by the practice having arisen of bottling and laying down wine,[2] improvement in its manufacture, and its greater strength and subtility, as contrasted with the rough, rasping, immatured liquors of the old régime drawn direct from the wood as in mediaeval times. There is no doubt that many of the smaller wine-glasses served also for spirits distilled from both fruit and grain, as well as for "aqua mirabilis," "surfeit water"—for which there were many receipts, "gold cordial," or other mysterious

[1] The change that silently takes place in the character of glasses is well evidenced to a Heidelberg student who, going back as a "Philister," after thirty years' absence, finds the "Thundering Salamander" drunk in vessels of quite a different kind to those of his earlier experience.

[2] See Introductory Notices, p. 40 (footnote).

combinations—"very good for the wholesomes," in the uncouth language of the Derbyshire baronet, "Sir John Linger," at the table of "Lord Sparkish."[1] The drawn, air-stemmed *Fiat* glasses of Jacobite societies are notable examples of such use. And if the wine-glasses are rather large for the cordial waters, there was venial compensation, because they were very small for wine, and particularly for punch; and, in fact, one is puzzled to think how so much of that once attractive mixture, now rather fallen under a cloud—save in University cities, where at least twenty seductive varieties flourish, hot, cold, and iced, and at civic feasts—could have been consumed with comfort at long sittings in such small doles.[2] And the mischief was that punch in the eighteenth century was generally drunk hot, and much too sweet, and men grew very stout in consequence.

The capacious goblets for beer, of which examples remain of nearly all the leading types of the wine-glasses, began to give way about the middle of the century to the tall strong-ale glasses, which were then welcomed as fitter adjuncts of a more refined table, but the great silver tankard of "October" went round throughout the century. Of the tall ale glasses more will be said in their turn.

Entering now upon the great punch period, a few words will be convenient upon the manner of action. It appears that punch did not come into fashion until the last quarter of the seventeenth century; Pepys makes no mention of it; no doubt it came with the "Deliverance," having been introduced into the United Provinces in consequence of the Dutch trade with the East Indies. The word is reported to be derived from the Sanscrit *pancha*—five, denoting the number of the

[1] Swift's Works, Miscellanies, *Polite Conversation*, vol. ix. p. 224, edit. 1751.

One kind of surfeit water was composed of twenty-seven different kinds of herbs, and French brandy. Another and more soothing sort was a subtle compound of brandy, poppies, and cowslip flowers, and a few herbs, the poppy element being essential. Gold cordial also had brandy for its basis, and gold-leaf for its decoration. *Aqua vitae*, like *aqua composita* and *aqua mirabilis*, was of late mediaeval origin; they varied much in their composition and were rather for medicinal than for table use. These, as well as the comforting "imperial water," were at any rate more bearable than *goa*, and more efficacious than *bezoar*. *Aqua vitae* contained gold or silver leaf, like the modern *eau de vie de Dantzic*, and each "aqua" consisted of a strange mixture of flowers, spices, and herbs, with a foundation of Gascony—that is Bordeaux, sack, or ale. All were carefully distilled by curious housewives, and "the conceited secrets" transmitted to their descendants, as in *The Best Book in the Town for all Sorts of Receipts*, MS. of Mrs. Elizabeth Postlethwayt, born Rogerson 1678, died 1730; of Barbara Kerrich, born Postlethwayt 1707, died 1762; and of Elizabeth Postlethwayt, born 1708, died 1794, in the possession of Albert Hartshorne.

[2] The nucleus of punch in the early part of the century was usually rum. "We can accommodate you with a tolerable lodging, give you a bottle of good Ale, which I remember our gentle fr[d] loves, and some rum punch. Sukey joyns in hearty Service to Gentle Jane and your self and we wish you a happy new Year and many."—Edmund Castle, vicar of Elme, Cambridgeshire, afterwards master of Bene't College, to Samuel Kerrich, D.D., Dersingham Hall, Norfolk, January 16, 173[0]/[1].—*Original Correspondence*, 1633-1828, *ut sup.*, vol. xii. p. 38, in the possession of Albert Hartshorne.

ingredients. This is an origin which philologists may be justified in thinking rather doubtful. To meet an obvious want the Monteith, the great silver punch bowl with a removable rim or "coronet" with an escalloped edge, was devised. It is said to have been named after a gentleman of fashion who wore a scalloped coat. The bowl was brought empty into the room, with the glasses, according to the number of the indentations, placed for safety's sake head downwards within it, the stems, as their length permitted, resting in the escallops, and the feet ranging around the bowl outside, like shields on the sides of a mediaeval war-ship. The glasses being taken out, the "coronet" was removed, and in private houses the mixture was concocted on the spot, a critical knowledge of punch-making being then a part of the liberal education of a gentleman. On the edge of the coronet, or of the bowl, the silver lemon-strainer was hung by the flat loop, the use of which must have greatly puzzled many modern owners of such pieces of plate to whom punch-drinking is now only a tradition. The punch ladle was frequently in later times hammered out of a five-shilling piece, the inscribed edge, DECUS ET TUTAMEN ANNO REGNI . . . . being left on the rim, and the bottom of the ladle, where the silver would be inconveniently thinned by the hammering, having a gold or gilded coin, generally of an earlier date, fitted into it. The long handles were sometimes of hard wood, but generally of whalebone, spirally twisted for the purpose of stirring the punch by rubbing the handle between the palms. For cold punch, ladles of horn, of willow wood, and beech were used. The former with their silver rims would sink, but the latter floated, and were accordingly provided with a check or stop half-way up the handle to prevent them from slipping into the bowl.[1] They have become rare ; Captain Darwin has an excellent example, and Mr. J. Seymour Lucas, A.R.A., has another with a wide-splayed flat handle, like that of a silver spoon of about 1790. The generality of the punch glasses held exactly one ladleful. As to other punch bowls, they were of Oriental china — there are many at Houghton, together with the plain drawn glasses, all known to have been used by Sir Robert Walpole at his "Congresses"—of Chelsea-Derby, and particularly Worcester porcelain, as well as of the delft and earthenware of Liverpool and of Leeds. Many of those for tavern use were of pewter, and ordinary salt-glazed ware sometimes inscribed as "punch pots."[2] Globular punch kettles in red pottery, imitating the Chinese, like the Böttger-

[1] In the possession of Mr. F. Cooper is a half-length portrait of a gentleman, in his own hair, of about 1760, seated at a table with a white Lowestoft china punch bowl before him, in which the wooden ladle floats. The sullen, solitary toper holds a plain, straight-sided glass, and at his elbow is a cocked hat filled to overflowing with gold coins.

[2] Up to about twenty-five years ago it was a common thing to find a pewter punch bowl inside

porzellan of Germany, with their braziers, are occasionally met with, and others for the same purpose should be easily recognised. The pretty little silver-mounted copper tea-urns, with green-handled vertical taps on their "urn tables," of the end of the century would have served for the same purpose.

the fonts of country churches. This has sometimes been thought to be the "decent bason" of the Rubric.

The punch bowl of the Liverpool Convivial Club, styled the Corporation of Sefton, of the end of the century held five gallons.

In *Cumberland and Westmorland M.P.s*, by Mr. R. S. Ferguson, p. 123, edit. 1871, a curious bill of expenses at an uncontested election at Carlisle in 1754 is given. The quantity of wine and punch that was provided, together with pies and tobacco, for the "canvass" is rather startling, not to mention the cost of "making Freemen."

In 1763 it was officially stated to the Duke of Northumberland that fifty-four hogsheads of different sorts of wine were usually provided by the Lord Lieutenant for a parliamentary winter in Dublin. This quantity included two hogsheads of arrack, brandy, and rum, no doubt for punch.—E. B. de Fonblanque, *Annals of the House of Percy*, ut sup., vol. ii. p. 533.

CHAPTER XV.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES — GROUP I. GLASSES WITH INCISED OR RIBBED-TWISTED STEMS AND WAISTED BOWLS—GROUP II. GLASSES WITH AIR-TWISTED STEMS AND BELL-SHAPED BOWLS—GROUP III. GLASSES WITH DRAWN STEMS—GROUP IV. GLASSES WITH BALUSTER STEMS.

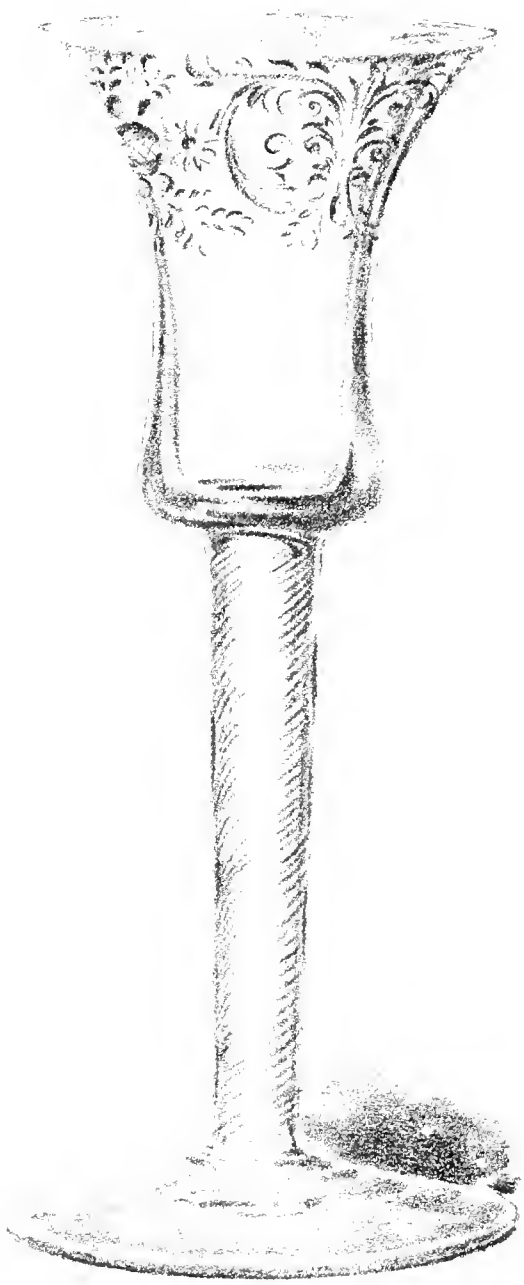
Group I. Glasses with Incised or Ribbed-twisted Stems—Waisted.

Allusion has been made to the first appearance in England of glasses with widely-spaced incised spiral lines or ribs in the stems.[1] In these lay the origin here of the modern twisted stems proper. Such outside twists had their rise in an ancient and much practised Venetian detail, and the English glasses which first present this feature in a finished and complete state belong to the early years of the eighteenth century. These stems were naturally first developed by the glass-makers in the Low Countries after two centuries of observation of the practice of Venice and of Altare. And in the same way that a Low Country baluster stem had its origin in a tall Venetian glass, stripped of its wings and accessories, so an English ribbed-stemmed glass is a somewhat rigid and heavy version of a more moderate vessel of the same origin.

The manner of the manufacture appears to have been as follows:—

A series of ribs were impressed by a mould, or otherwise, on a short stem. This was attached to the partially formed bowl of a glass, and heated; a rapid

[1] See p. 245. The term *Twisted Stems* will be used in the present work, not so much because it offers an accurate technical description of the standards of glasses thus decorated, as that it has been so long in use and is so well understood by connoisseurs that no good end would be served by now disturbing it. A foolish practice has arisen of late years of altering or tampering with long accepted nomenclatures in antiquarian literature. They may not be absolutely comprehensive and exact, few nomenclatures of the kind can be, but they have become enshrined in archaeological learning; they are well understood, and sufficiently serve their purpose; indeed, to alter now what time and scholars have given stability to only has the result of causing confusion at home, and bewilderment on the Continent. An air-twisted stem in France is *quadrillé*, an opaque-twisted one *torsiné*.



35.—ENGLISH GLASS.

rotatory motion was given to it, the stem was prolonged, and the ribs resulted in a close exterior screw, tight at the bowl end and loosely dying away at the other to which the foot was attached, and where the action of the heat for that final operation would be greatest. Constant features of these somewhat rare glasses, whose career must have been very short, are the marked "waisted" form of the bowls, their folded feet, and the diminished bulk of the stems half-way down, the natural result of the sudden twisting from the fixed point on the bowl. Two early examples in the old bubbly metal, bought in Windsor in 1886, are in the cabinet of the author (Fig. 176).

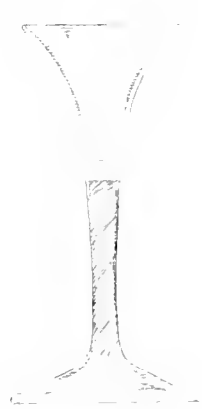


FIG. 176. (One third.)

FIG. 177. (One third.)

The waisted bowl was much used in conjunction with the air-twisted stems of drawn glasses, and when such separate stems, and those with opaque twists came in, a new character was given to the bowl in a series of glasses which are rarely met with. These have considerable interest from the beauty of their stems and engraving; two examples are shown from the collections of the late Mr. Soden Smith (Fig. 177), and of the author (Plate 35). An interesting dated glass belonging to this group is in the British Museum. It is inscribed S^r I POLE FOR EVER 1754, and seems to refer to Sir John Pole of Shute House, Devonshire, who succeeded as fifth baronet in 1741, and died in 1766. China plates with the same inscription have been noticed. They must all pertain to a contested election.

GROUP II. GLASSES WITH AIR-TWISTED STEMS—BELL.

It seems probable that the Low Country air-twisted stems originate from the beads in the bulbs of balusters,[1] and that they soon became popular in England in consequence of the unsatisfactory results and limited scope of the ribbed stems which intervened. Certainly the superior English metal was better suited to this manipulation, and the air stems here soon went far beyond those made on the Continent, and had a long and honourable career. In the Low Countries they were but little made, and perhaps only really well in Liège and in the latter part of the century. The oldest of the English air-stemmed glasses which have been preserved are the scarce representatives of the forerunners of a beautiful series. It is possible that they were first made here in the time of James II. The

[1] See Introductory Notices, p. 57, for a description of their manufacture. It is obvious that more regularity is evinced in their make as the century advanced and practice improved.

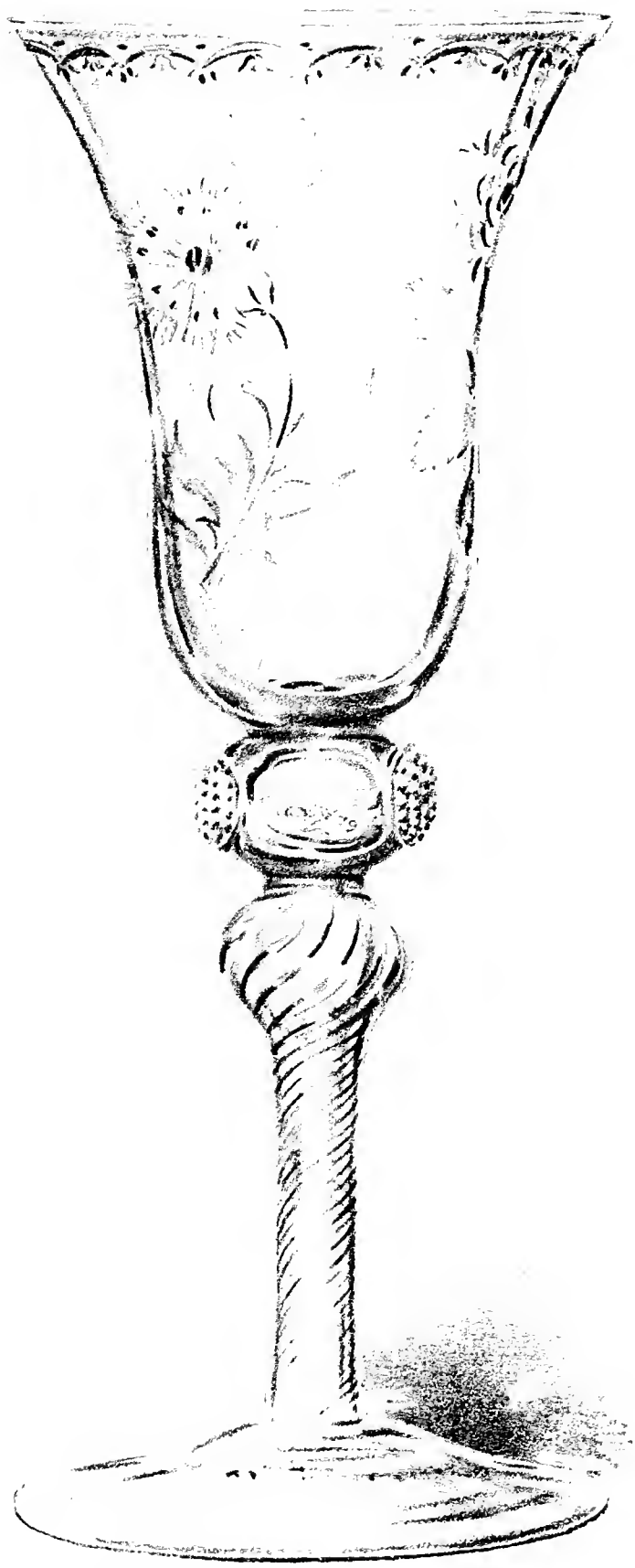
earliest examples have the waisted form of bowl, such as is peculiar to the ribbed-twisted stemmed glasses; and on these first appears engraved the natural Rose of England. This decoration was subsequently transformed, perhaps about 1720—but the precise date is very difficult to determine—into the conventional quasi-heraldic White Rose of Stuart—almost without exception with six petals, as distinguished from the proper heraldic five-leaved flower, which had been derived from the heraldic Tudor rose, itself a combination of those of York and Lancaster. This badge was seized upon later alike by the adherents, and the waverers, of a great historic cause, and—with the addition of certain mottoes and signs, and without them—engraved upon glasses of the several fashions of the time, and after it, when thirty thousand pounds was the assessed price of the person of a proscribed Prince. They long played a large, and secret, and dangerous part in the hidden social life of the country. The Jacobite glasses will be touched upon separately later on.[1]

We have stated that the waisted glasses with ribbed and twisted standards were rapidly supplanted by those with air-twisted stems and bell-shaped bowls. These were followed by another series of bell glasses, again a beautiful and popular group, which had a long course both here and in the Low Countries, and is distinguished by the variety and delicacy of its stems with opaque white, and later with coloured twists. They will be dealt with presently.

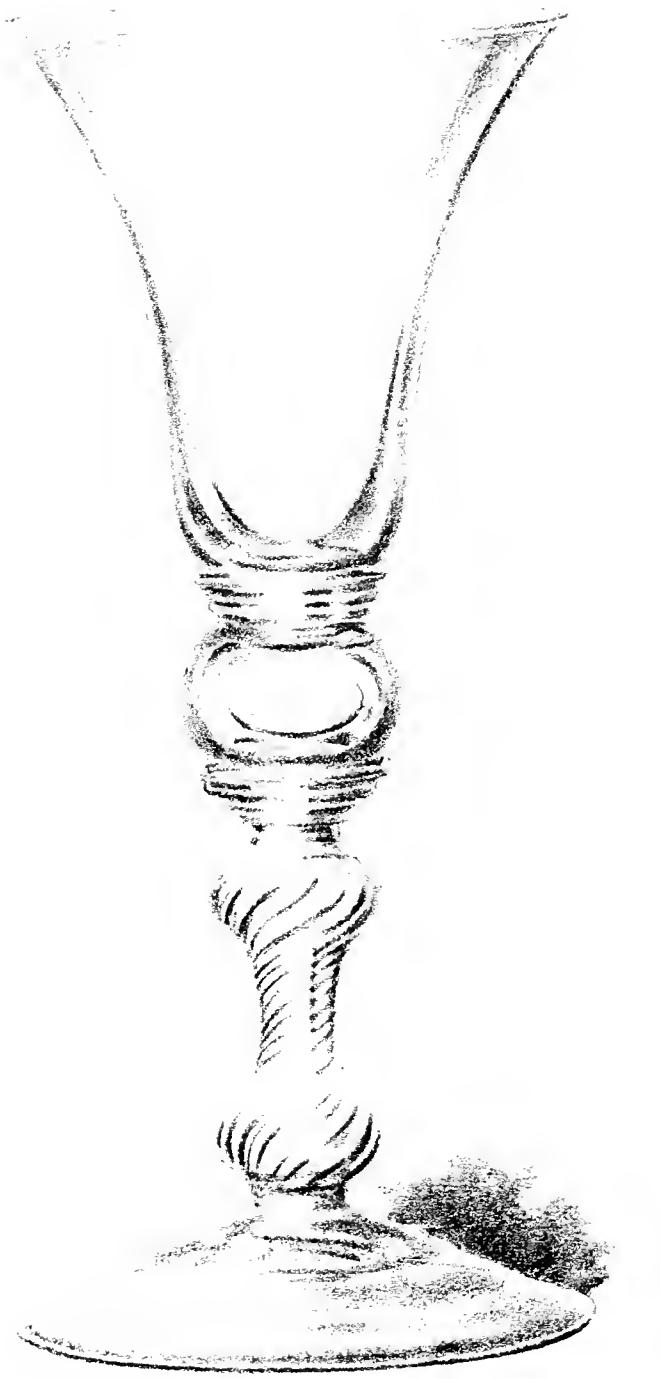
The early forms of air-stemmed bell glasses have necks and collars, and single or double bulbed or knopped and shouldered stems. In their first period the twists were imperfect, owing to lack of practice in the peculiar manipulation required, and they never had the precision of the drawn air stems. The later examples of these bell glasses, with a few exceptions, have necks only, an almost necessary condition for the convenient attachment of the air-twisted stem to the bowl. A prominent example of the earlier kind is a glass in the Slade Collection in the British Museum, engraved with a Rose of England—that is, heraldically—the natural flower upon its stalk, a pink, and a conventionalised gillyflower. In a bulb below the bowl, decorated with flat strawberries, is a threepenny piece of Charles II. dated 1679. Round the rim of the bowl is an engraved and gilded ornamental border, not unusual with glasses later than this period (Plate 36). The coin is misleading,[2] like those in the bottoms of punch ladles, but the glass can hardly be later than the time of William

[1] No other country in the world contains such a peculiar and interesting series of historical relics of a hapless cause, and it is very desirable that a complete collection of the Jacobite Glasses should be formed for the British Museum before they come to the inevitable end. Scattered examples have little value compared with the united interest of an entire collection.

[2] See p. 237.



36.—ENGLISH GLASS.



37.—ENGLISH GLASS.

and Mary; it is said to have come from Whitehall, and no doubt it is English. A smaller glass of much the same shape in the cabinet of the author contains in a cavity a sixpence of Charles II. dated 1687 (Plate 37); another typical glass of the time is in the same collection, ornamentally engraved round the rim in a more advanced style than that of the Slade example (Fig. 178), as well as another still larger, with the same character of engraving, on a funnel-shaped bowl, with a plain knopped stem, apparently from the Low Countries (Fig. 179).

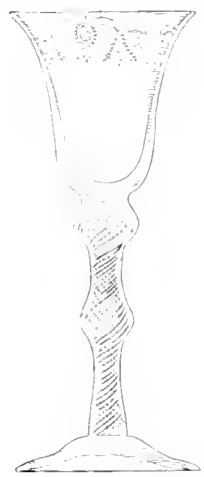


FIG. 178. (One third.)

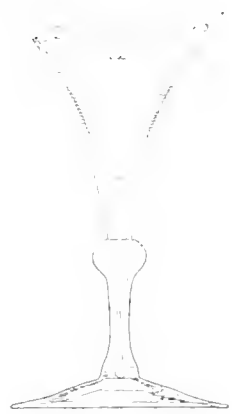


FIG. 179. (One third.)

Though coins are not reliable evidence as to the dates of glasses, they are valuable with regard to period, for it is almost inconceivable that a coin of Charles II. would have been put into a glass out of respect for him after the time of William and Mary, nor was the memory of this monarch so highly esteemed as to make it likely that such long posthumous honours would have been offered to him in the time of "the '15" or of "the '45." Charles II. left no legitimate descent, and in this relation, indeed, one would have rather expected a coin of James II. in a Jacobite glass of the early years of the eighteenth century; but no such example has come under the author's notice.

Some time before the middle of the century, perhaps about 1720—but a date is reluctantly suggested — the conventional heraldic rose with two natural buds first occurs upon the air-stemmed bell glasses, and nearly always with a butterfly on the opposite side. Apart from the Jacobite glasses, which give a high character to any collection, these are, doubtless, the choicest and most picturesque of the English glasses of the eighteenth century. A noticeable point about them and certain others of the better sorts of glasses of the early part of the century, and throughout their respective courses, is the rare occurrence of the folded foot, a feature almost constant with other coeval but commoner types of glasses. There is a remarkable similarity in the designs of the engraved roses, indicating that the glasses upon which they appear were only of limited manufacture, and produced by few glass-houses. As far as the author knows, the air-stemmed bell glasses were not engraved with vine leaves and grapes.[1] This was a decoration which was introduced later, perhaps from

[1] Many of the early Rose glasses have had the edges of their feet ground off in certain parts and re-polished to get rid of chipped margins. This shows in what estimation they were held.

Holland. It is certain that the heraldic Stuart rose and its two natural buds were never engraved upon glasses for use in the Low Countries; but it is apparent that some of the opaque, twisted-stemmed glasses from the Continent had the rose and buds added here. The character of the stems should generally settle this point.

The air-twisted bulbous stems separately attached to the bowl did not find favour with the makers after the middle of the century. Their manufacture was tedious, and the first attempts to manipulate the bowl and stem in one piece, and to retain the neck, keeping the old form, were attended with only moderate success. The continuity of the twists was broken in the operation, as shown (Fig. 180). But bulbous or knopped air-twisted stems were occasionally made successfully, and apparently continuously with the bowl, as a rose-engraved example in Mr. B. F. Hartshorne's possession indicates (Fig. 181). The others made separately, as the distinct neck implies, were better managed, and are illustrated with the Jacobite glasses. The fashioning of a twisted stem with opaque white canes of different sizes, instead of with air lines derived from beads, was a much simpler and surer process, and with such bulbed and straight stems the building up of a wine-glass in the usual way—bowl, stem, and foot—was more easily carried out. In this new style, therefore, as to stem, the bell-shaped bowls continued their course, as will be shown in Group VI.

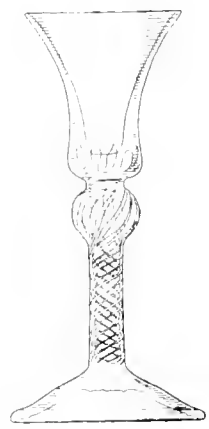


Fig. 180. (One third.)

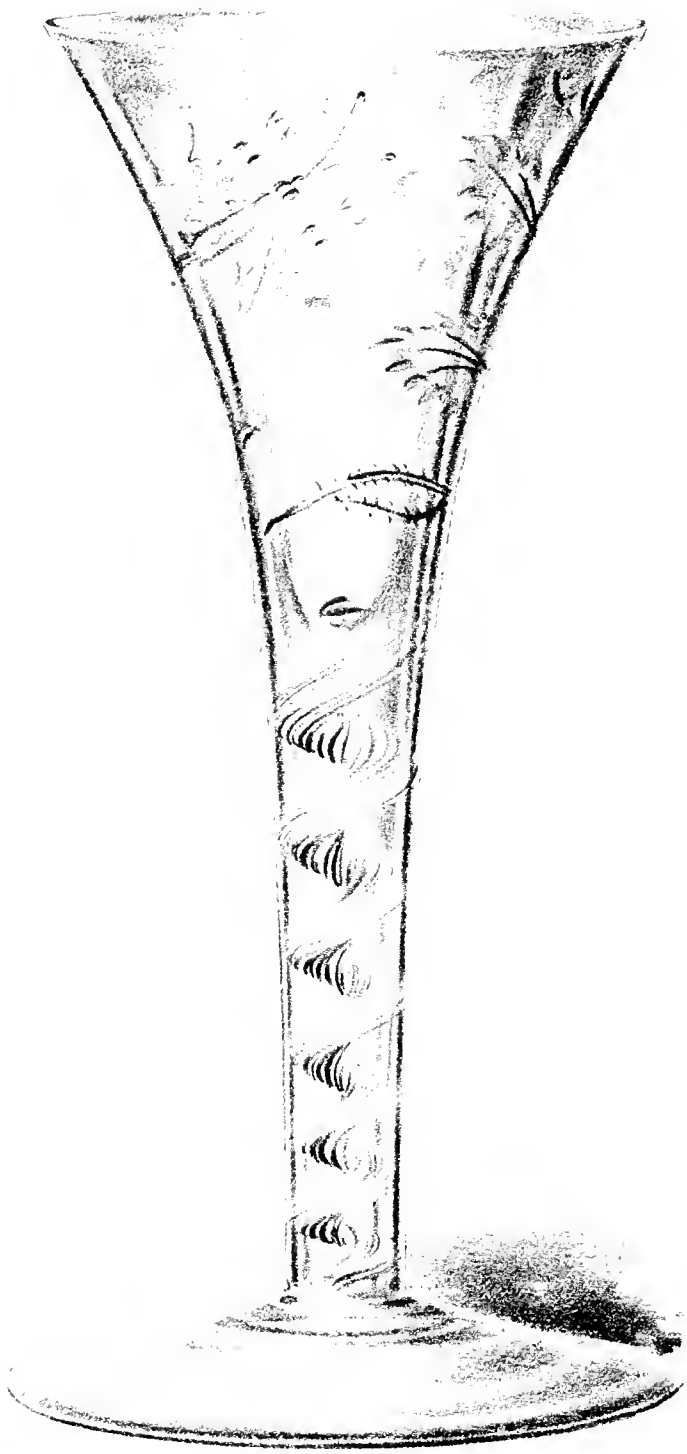
Fig. 181. (One third.)

Group III. Glasses with Drawn Stems.

In the meantime "drawn" glasses, which must have had their origin in the *flûtes*,[1] such as Cornelius de Heem shows in his pictures of still life, were introduced—that is to say, glasses of which the stem is drawn out from the bowl, and the foot attached to it, the whole consisting of two portions only. Thus was offered a great opportunity for the development of the air stems in a new direction. Nothing could be simpler or more successful than their manufacture, by drawing out and revolving a series of bubbles introduced into the base of a partially formed bowl, provided that the best metal was used;

[1] See Introductory Notices, p. 54.

38.—ENGLISH GLASS.



39.—ENGLISH GLASS.

and, as a matter of fact, few glasses have been produced in England with more elegance and precision than the drawn air-stemmed glasses of the second and third quarters of the eighteenth century. There is no series of vessels to compare with these on the Continent, either for form, historical interest, or brilliancy of material. For they are essentially English, and whether engraved, like the earlier ones, with arabesques—as in two shattered sapphire-blue examples in the cabinet of the author (Plate 38), recalling the much-discussed "blodius" of mediaeval vestments; with a rose and two buds and the expanded

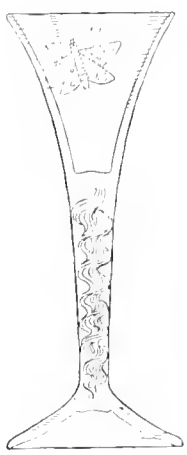


FIG. 182. (One third.)

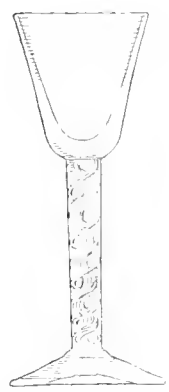


FIG. 183. (One third.)

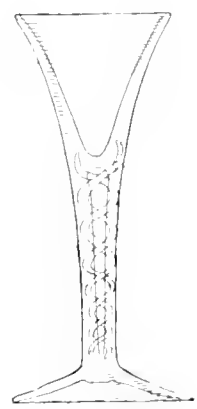


FIG. 184. (One third.)

butterfly; with the same flower and an emblem; with the crowned cypher or a motto of the Chevalier of St. George; or with cognate ensigns of the *cultus* of Prince Charles Edward and the "word" of the Cycle—they are all objects greatly to be desired by the collector.

During the long course of the drawn air-stemmed glasses—for they continued to be made until about 1780—a beautiful variety of twisted stem was introduced. This was apparently formed by pricking a number of holes close together on one side of the lower end of the lump of glass in process of manipulation by the glass-blower (Fig. 182). This being coated with metal and the air-bubbles incarcerated, the stem was drawn forward and revolved, with the result of a brilliant and most effective multiform spiral (Plate 39). Separate stems of bell and straight-sided glasses were also occasionally made in this way. In some rare late cases an opaque white spiral is also introduced; by what process the author has not ascertained. An example is shown from his collection (Fig. 183). With moderate success in tavern glasses, three larger tears or beads were introduced, and the three bubbles of air entrapped in such positions that the two upon revolution formed spirals round the central line (Fig. 184). In some rare early examples of the drawn air-stemmed glasses, the lower end of the finished stem

was planted upon a beaded bulb, and this set in its turn on the domed foot, the glass being thus again formed of three separate parts. Such a glass, engraved with the crowned cypher of the Old Pretender and verses of the Jacobite Song, which was eventually transformed into the Georgian National Anthem, is in the collection of Mr. Murray Threipland, at Fingask Castle, and a plain one is in the cabinet of the author (Fig. 185); these are the only two glasses of the kind that he has met with.

Other scarce and early drawn air-stemmed glasses have waisted bowls (Plate 40), and in these and the latest versions of them, and in their varieties with the stems set upon plain or beaded bulbs (Fig. 186), the usual long funnel-shaped form was diversified by the stem being narrowed immediately below the bottom

FIG. 185. (One third.)

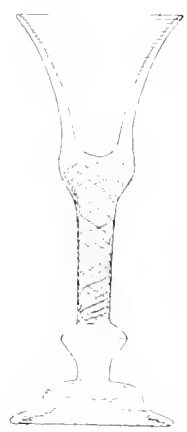


FIG. 186. (One third.)

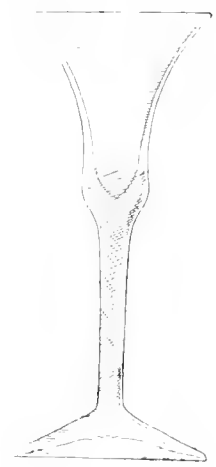


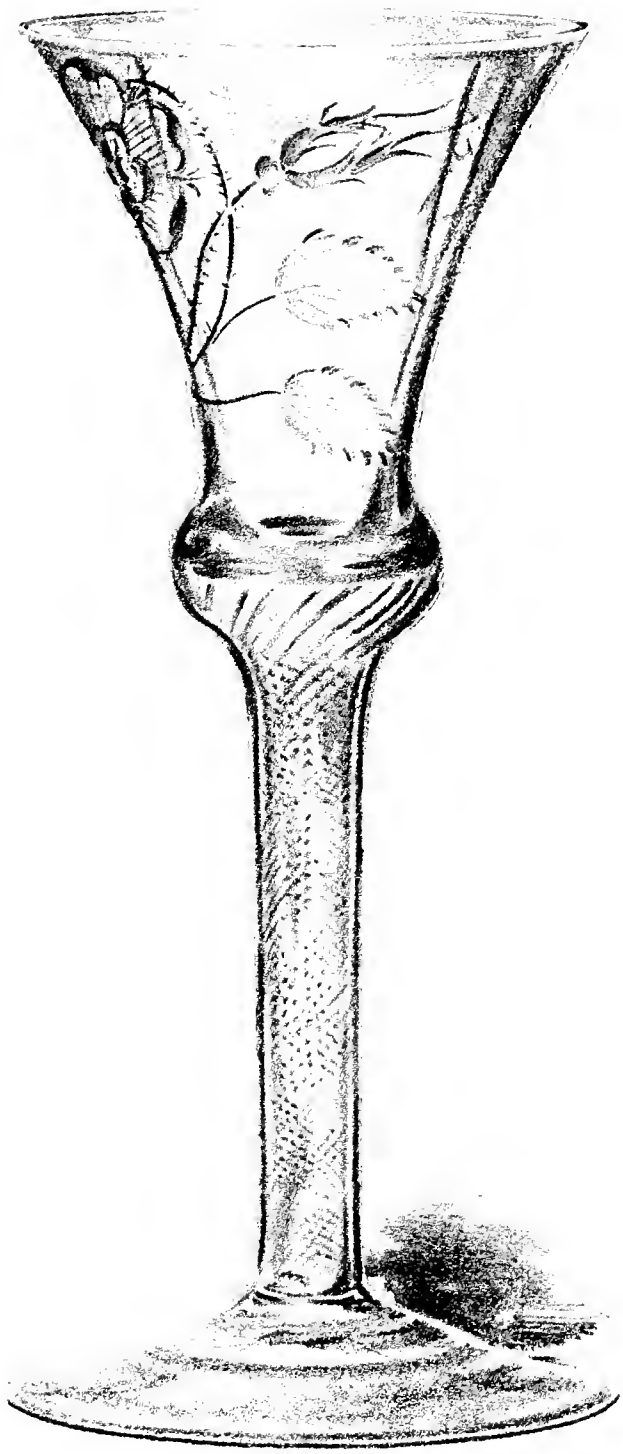
FIG. 187. (One third.)

of the bowl, and continued in diminished thickness (Fig. 187). In other groups of later glasses to be spoken of, lengths of air-twisted stems were used in the place of opaque twists or plain stems; these were also sometimes widened, like the opaque twists, into a half-way bulb, properly called a knop, a reversion to earlier types, and thought by some connoisseurs to be in the interest of gouty fingers, the threads being twisted tighter above and below the knop. But none of these introduced lengths in air twists approach the accurate manipulation of those in the drawn air stems proper. In some scarce examples of belated waisted glasses with drawn air stems, about 1760, a cable moulding, or banding, as on an Early English shaft, is applied, which would perform the office of the half-way bulb or knop just alluded to (Fig. 188).

GROUP IV. GLASSES WITH BALUSTER STEMS.

The heavily moulded wine-glasses of the last years of the seventeenth and the early years of the eighteenth century, already spoken of,[1] appear to have soon

[1] See p. 236.



40.—ENGLISH GLASS.

taken a smaller form for cordial waters. We shall meet with them again under glasses of that class. No doubt the weight and thickness of the larger versions were not favourable for wine.

In their place arose a group of elegant glasses with baluster stems, the earlier standards being solid (Fig. 189), and those more advanced lightened with beads

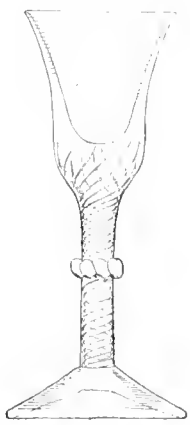


FIG. 188. (One third.)

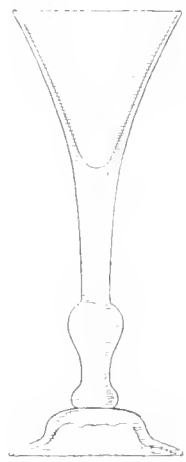


FIG. 189. (One third.)

FIG. 190. (One third.)

in the bulbs (Fig. 190), and engraved round the rims at first with arabesques (Fig. 191), and afterwards with vines (Fig. 192); the latter decoration first appears on glasses of this group, and of which the bowls are all of the funnel-shape. They were apparently inspired by the contemporary baluster glasses of the Low Countries. As the century advances, they become plainer in the

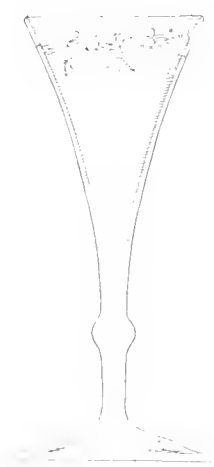


FIG. 191. (One third.)

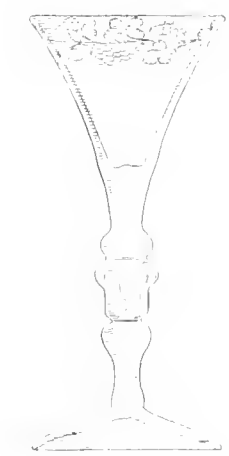


FIG. 192. (One third.)

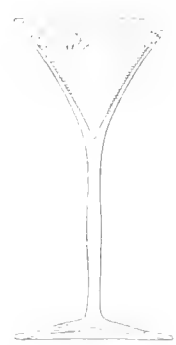


FIG. 193. (One third.)

stems and with lofty domed bases. It is occasionally difficult to distinguish some of them from those of Liège or other Low Country town make, and which have been introduced into England as graceful "curiosities" in modern times. They are both thinner and lighter than English glasses. An example of the earlier kind, in the cabinet of the author, is exactly the same as those shown in use by the Duke of Newcastle, who died in 1711 from a fall out stag-hunting,

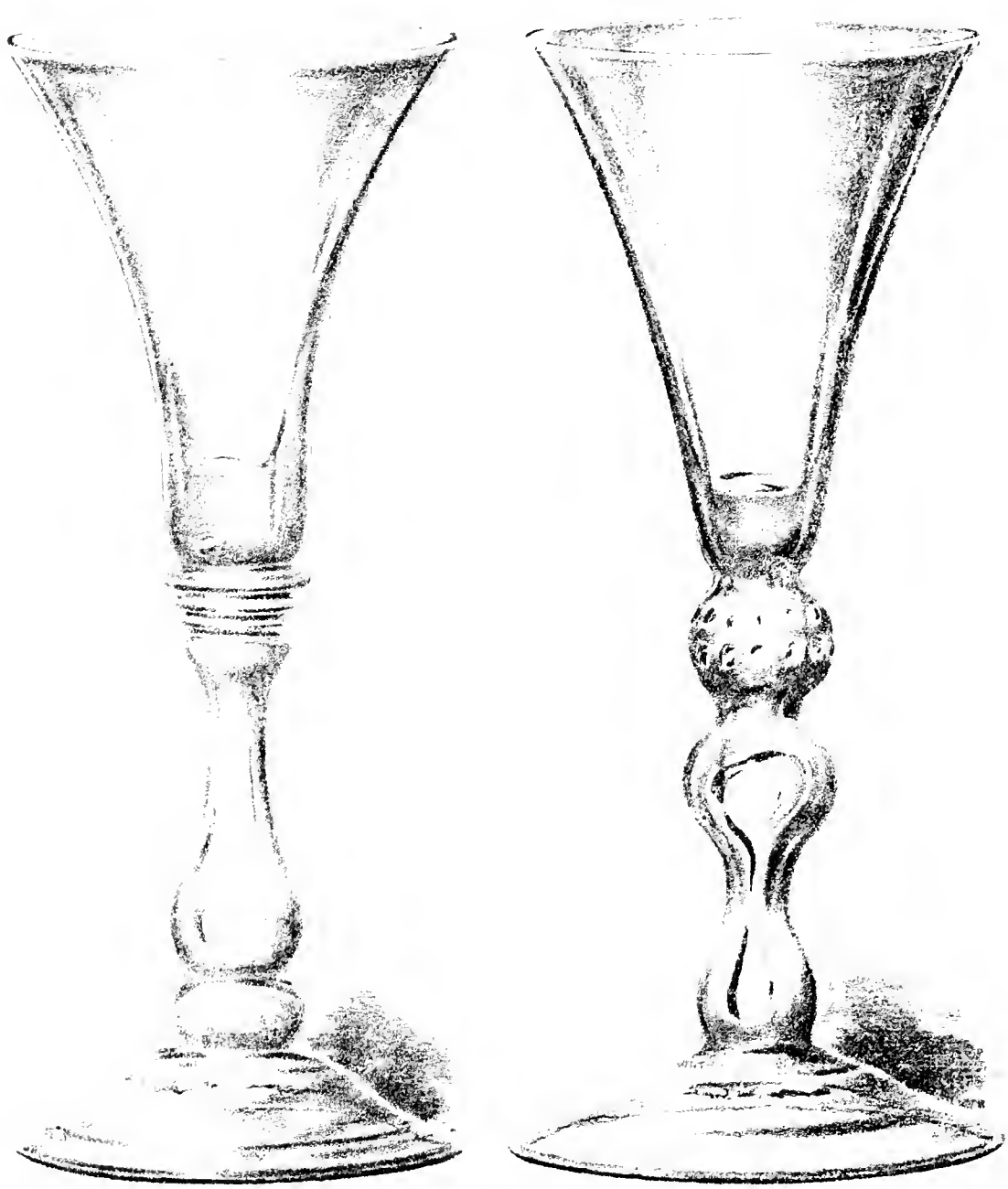
and by the Earl of Lincoln, who died in 1728, in the only group of two among the forty-seven portraits by Kneller, who died in 1723, of members of the Kit Cat Club, now happily preserved at Bayfordbury Park, Hertfordshire, by a descendant of Tonson. Thus the date of the glass in question—No. 1—is assured to be before 1711;[1] a variety with a beaded stem—No. 2—is also shown (Plate 41). Many later examples are in the author's collection, and a choice little glass with a plain stem, which belonged to George II., perhaps not English, is in the British Museum (Fig. 193). This excellent group of glasses did not linger long. It was swamped out, partly by more than one series of quite a different kind—such as the bell, the early straight-sided, and the ogee glasses, and partly by a copious array of vessels of a lower class now to be treated of.

[1] The founder of the Kit Cat Club—the name being derived from that of the cook, Christopher Cat—was Jacob Tonson, in 1688. It came to an end about 1720. It had its meetings at the "Fountain" in the Strand, and one of its country resorts was the "Upper Flask" on Hampstead Heath. Its main principles were the Whig interests under the countenance of such patriots as William, Duke of Devonshire, and Sir Robert Walpole, and the welfare of literature with the auspicious presence of Addison, Steele, and "the great" Mr. Congreve. Social fashions and follies were well looked after, we may be sure, by such lively members as the Duke of Kingston—father of Lady Mary Wortley-Montagu, herself a Kit Cat "toast" in person at the age of seven years—and Lord Mohun, who twice stood his trial by his peers for murder, and was finally slain in a peculiarly bloody duel by the Duke of Hamilton, 15th November 1712. Thus the club was soon constituted as an authority for the election for a year of reigning "toasts" of the town. The names of these fair luminaries are recorded to have been engraved on the club toasting-glasses, together with glowing verses in their honour. Those written by Halifax for the club glasses in 1703, for the exalted beauties of the day, are well known. It does not appear that any of these interesting relics have survived, but printed lists exist at Bayfordbury of the names of some of the "toasts," together with Kit Cat letters. Steele's derivation of the word "toast," written rather for our admiration than our information, in No. 24 of *The Tatler*, 4th June 1709, will be fresh in the minds of readers of those delightful papers. He speaks of the names of the ladies written with a diamond on drinking-glasses, and gives the monitory reasons why it was done. The flask held by the Duke of Newcastle in the picture is covered with wickerwork, and is probably for the "marvellous searching wine Canary." In Howell's *Discourse to Lord Clifford, on Wines and other Drinks*, 7th October 1634—*Familiar Letters*, vol. ij. p. 76, edit. 1650—he says that "when Sacks and Canaries were brought in first among us they were used to be drunk in aqua vitae measures, and 'twas held fit only for those to drink who were used to carry their legs in their hands, their eyes upon their noses, and an almanack in their bones; but now they go down every one's throat, both young and old, like milk." In their decayed condition at Liège, in the beginning of the eighteenth century, many of the Italians had sunk to the condition of coverers of bottles; this fashion was derived from the Romans, and by them from the Egyptians who used papyrus stalks for the purpose.

The Duke of Newcastle holds his glass by the foot, according to the old world practice. In Martin Schön's print of the *Adoration*, Melchior and Balthazar both present their cups holding them by the feet, the Ethiopian king raising the cover of his offering. In the *Biblische Figuren* of Virgil Solis, within borders, printed at Frankfort in 1565—"Apokalypsis, XVII."—"the woman arrayed in purple and scarlet colour" holds the golden cup of abominations aloft by the foot—

> Die rote Hur den Drachen reit,
> Den Kelch dess Giffts und grüwels treit.

Albert Durer's "Great Fortune" does likewise, and so do several of the figures in Franz Hals's "Banquet of the Officers of the Arquebusiers of St. Adrian," at Haarlem. Many other illustrations might be adduced.



1 2

41.—ENGLISH GLASS.

CHAPTER XVI.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED—GROUP V. TAVERN AND HOUSEHOLD GLASSES—GROUP VI. GLASSES WITH OPAQUE-TWISTED STEMS AND BELL-SHAPED BOWLS.

Group V. Glasses, Tavern and Household.

Concurrent with the waisted, ribbed-stemmed, and the air-twisted glasses of both kinds, and running from end to end of the century, were those of a commoner sort for tavern or household use, made in any or all of the flint-glass houses tabulated by Houghton in 1696, and from that time onwards wherever drinking-glasses were made in England. They had correspondents on the Continent somewhat allied to them in shape, but generally in inferior metal. The distinction is naturally easier to point out in the presence of the actual glasses than to describe in print. The rudeness, or simplicity of form of the English examples was at first influenced by their then only foils as to general domestic requirements of a better kind—the elaborate heavily-moulded glasses of the end of the seventeenth and early years of the eighteenth century, in so far as they exhibited specific mouldings, and the bowls of the older examples correspond to a certain extent with those of glasses of a better kind to which attention has already been directed. Others, though plainer and heavy in make, were tall and picturesque. When the Drawn Glasses came in, those of tavern and ordinary household use soon fell into that form, and they continued in it through all the changes and chances of the century, affected but slightly by the different varieties of glasses of a better kind, which in their turn arose and faded away during the lapse of a hundred years (Figs. 194-198).

In noticing more critically the Tavern and Household Glasses, those of the first quarter of the century are very capricious in shape; it was an important period of change, and close classification is impossible. Some tavern glasses, indeed, among so many thick ones, are far from substantial, and as a matter

almost of course have the waisted form so easily given to thin glasses, and with only a single moulding above the foot (Fig. 199). It is to be observed that no English glasses exhibit more well-proportioned, though somewhat solid shapes,

Fig. 194. (One third.)

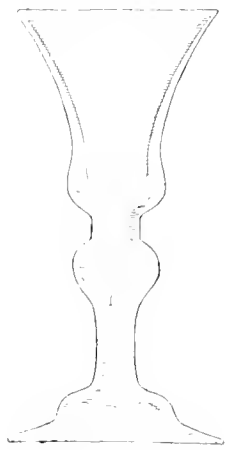


Fig. 195. (One third.)

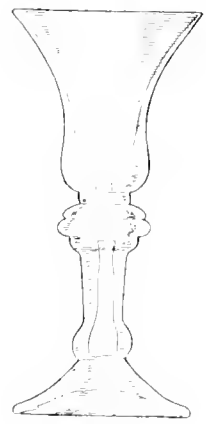


Fig. 196. (One third.)

in regard to their purpose of general usefulness, and greater depth and brightness of metal than those in one of the classes immediately following, and which date from about 1730 (Fig. 200). So good a form was not quite lost, for, though it soon quitted the wine and the punch glasses, it survived for a season in a modified shape with those for strong waters. This outline, of which there is an excellent example in the British Museum—the fellow of one that has passed from a

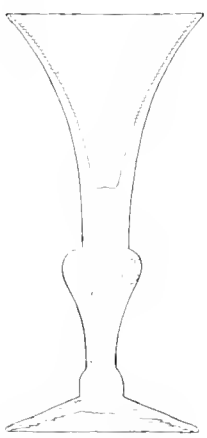


Fig. 197. (One third.)

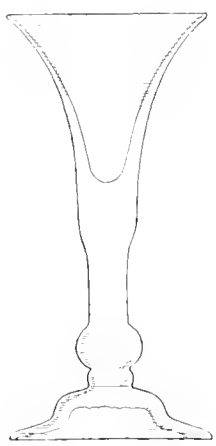


Fig. 198. (One third.)

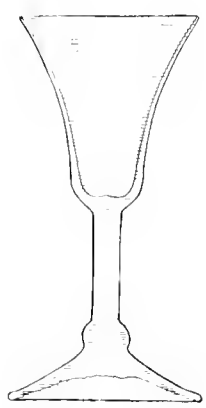


Fig. 199. (One third.)

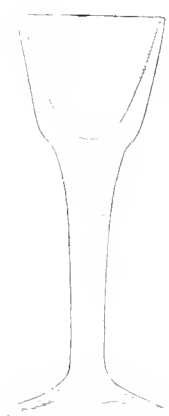


Fig. 200. (One third.)

dealer into private hands—belongs rather to the straight-sided than to the ogee series. It is engraved in good style with the coat of Pyle (Az), 3 piles (Or), on a canton (Gu) a leopard's head (of the second). A cordial water glass of the same character is in the author's collection.

For convenience of classification, the rest of the tavern glasses under consideration of the first half of the century may be divided into two kinds—those with "blows" or "tears" in the stem, and those without. As to the former, the

long bubble is, as every connoisseur in glass knows, a deliberate operation, and not an accident of make, and the value of the glass is so far—*tant soit peu*—enhanced by this attribute. As long as the large and extended blows in the stems were the fashion, the glass took something of its shape accordingly, both the bottom of the bowl and the stem varying in outline conformably with this

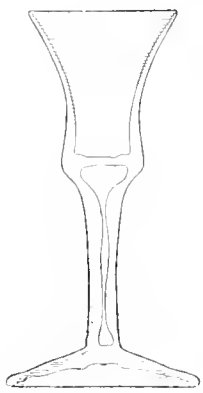


FIG. 201. (One third.)

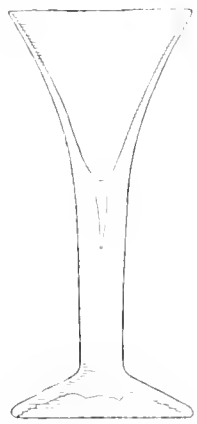


FIG. 202. (One third.)

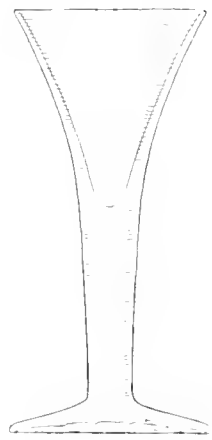


FIG. 203. (One third.)

condition (Fig. 201). But the introduction of the plain drawn form soon banished the blow to the middle of the stem in a greatly modified form, and this shrinking finally to a "tear,"[1] in the modern euphemism—a tear which is always upside down—soon after the middle of the century vanished altogether (Fig. 202). The

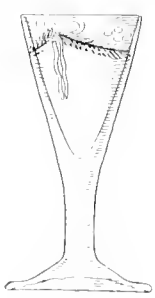


FIG. 204. (One third.)

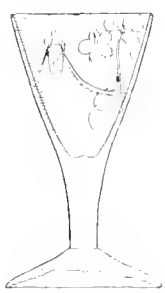


FIG. 205. (One third.)

FIG. 206. (One third.)

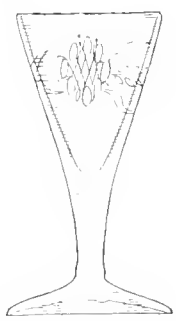


FIG. 207. (One third.)

"drawn" tavern and household glasses continued with plain solid stems to the end of the eighteenth century (Fig. 203), and a little beyond that date, overrunning the short port, white, and strong ale glasses. These latter had their bowls rudely engraved with festoons, as in some of the china of the time (Fig. 204), with conventional flowers and the hovering bird, often touched with oil gilding, and with flat, folded, and unfolded feet (Figs. 205-207). With these declining repre-

[1] In appearance they are

Like the famed drop in crystal found,
Floating while all was frozen around,

which so fascinated the poet Claudian that he wrote nine epigrams of singular beauty upon it. Addison records having seen such a natural relic at Milan, and at Vendôme, where the enclosed drop was believed to be a tear shed by Our Saviour over Lazarus, gathered up by an angel, enclosed in crystal, and given to Mary Magdalene.

sentatives of a copious series the old shape became merged into the well-known short, funnel-shaped glasses of another suite, with meagre octagonal stems fluted half-way up the bowl, a form still in ordinary use at the present day. They are very wretched and, like Edward III.'s gourd of glass, of *niente prise;* no collector of the future will ever look at them save in the light of miserable and unked survivals.[1]

The illustrations of the tavern and household glasses, taken, for convenience of easy reference, from the author's collection, show sufficiently the sequence of the group. In an attempt to deal here *seriatim* with the whole the text might easily exceed the discourse, on account of the minute variations which characterise so extended a series of subordinate glass vessels. However, the relative positions of deviations in the lengthy line may be readily assigned by the intelligent collector with the assistance of the leading types now given or referred to. The folded foot is the common attribute of those of the early part of the century. One glass, of which the date cannot be later than 1740, has been specially singled out for illustration because the base of the bowl exhibits two sickle-shaped streaks of pure lead, arising from the excessive quantity of oxide of that metal reasserting itself in its natural state, just as it did more than a century before, to the bewilderment and dismay of the old glass-makers and the perforation of the pots (Plate 42). This glass shows how determined the English makers were to increase the dose of lead in their famous "flint" glass. A tavern glass inscribed "Fuller and Brown the 394," in type of the *Fiat* of the Jacobite Cycle, has almost the value of a dated example (Fig. 208).

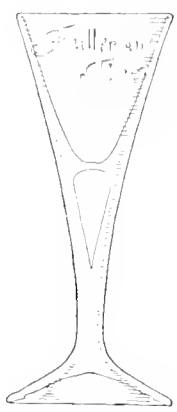
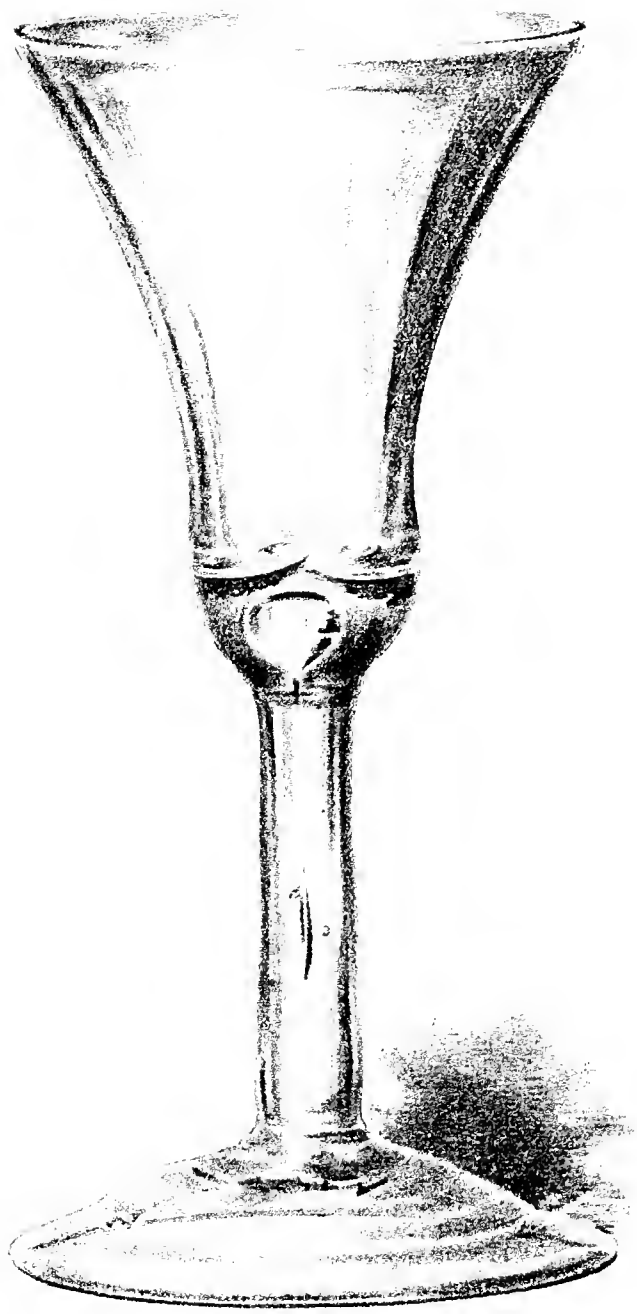


FIG. 208.
(One third.)

Although the bulk of the tavern glasses have no artistic merit beyond a certain sort of old-world quaintness, those of the early part of the century at least deserve more attention and respect than they have as yet received from collectors, and the whole series fills so large a space in the long history that a few more words may be said in their behalf. The earlier ones were the types of the drinking-cups of the wits, the beaux, and the men who comprised the most brilliant literary society of modern times, when tippling in taverns was the fashion, and coffee-houses and clubs took their rise; and one can hardly refer to the glasses without thinking of "Glorious John" at "Wills's"; Addison in his dignity, with his lofty genius, at "Button's"; Steele flashing in, and often staying

[1] The modern glasses in use in the Hall of the Inner Temple are survivals—heavy, stumpy, and capacious—of the old drawn tavern glasses before their extinction.



42.—ENGLISH GLASS.

too late, at the "Rose"; or Pope, sickly and moderate, at "White's." Then were in London crowds of men of fashion, country gentlemen, and military officers flushed with victories in Germany and Flanders, each bent upon the same duty of "toasting" somebody.[1] Thither also came troops of vicious "bloods," "sweaters," wicked "mohocks" in Kevenhuller hats, and smart "gentlemen of the road," all with their perpetual pipes, their flat-spurred "broseleys," and punch, at such resorts as the "Young Devil" tavern in Fleet Street—to which the *Collegium Antiquariorum*, now the worthy Society of Antiquaries, gave a tone in 1707 and 1708; at the "Old Devil," Temple Bar—to-day impersonated *sub Jove* by the City Griffin; at the "Bell," "Lockits," the "Garter," or the "Rainbow," or, as chance might fall, in any other handy tavern or mug-house. How the generality of these men behaved themselves at the tavern tables is well shown in the prints of Roberts's *Calliope*. All the frequenters of such places went armed, and many were prompt to draw upon the smallest provocation, or to force a quarrel.[2] As Squire Mockmode says in Farquhar's *Recruiting Officer*, "Going to the devil was then very modish," and much passed for wit that was certainly not good manners. All seem then to have borne Cowley's lines in mind and acted up to them—

> Nothing in nature's sober found,
> But an eternal health goes round.
> Fill up the bowl then, fill it high,
> Fill all the glasses there; for why
> Should every creature drink but I;
> Why, man of morals, tell me why?

Thus the duplicates of the ordinary glasses of a great and historic society, in its brilliant, strange, or wild phases, should have something more than the mild and transient interest of the later vessels of less individuality, or more ornate. The glasses of the taverns, when humanity was not yet swamped by fierce journalistic publicity, where life was so much lived, and where "sweet Lepell," Mary Bellenden, and scores of others—"Youth's youngest daughters"—were honoured as *Toasts*, should therefore rise in the estimation of collectors.

[1] "You will see by Matt's that he glories in his love of the fair Quaker. Truth is she is very pretty, and might warm any breast but mine, dead to all female charms"—he was then in his twenty-first year—"we meet every night about 6 of us at a Coffee house over against her (wch is from thence called Mr. Kenrick's office) and sometimes adjourn from thence to the Bell Tavern, to toast her in a glass of excellent neat Port. I heartily wish thou coudst be wth us."—William, son of Samuel Bradford, Dean of Westminster, Bishop of Carlisle (1718-23), to Samuel Kerrich,—London, 14th October 1717, *Original Correspondence*, 1633-1828, *ut sup.* vol. xi. p. 118, in the possession of Albert Hartshorne.

[2] "The Schemes of good breeding and complaisance are now such that make ye fine Gentleman and ye good Christian incompatible."—Matthew Kenrick to the same, London, 2nd July 1716, *Original Correspondence*, ut sup., vol. xi. p. 4.

Coeval illustrations of wine and punch glasses are met with in prints and in illustrated volumes, but, of course, rarely in English pictures, except in those by Hogarth. It must suffice now to mention, touching the early part of the century, the graphic presentments that head the songs in *Calliope*, vols. i. and ii., 1739 (Plate 43), in which every page is from an engraved copper-plate by Henry Roberts, at the time when there were many good French engravers in England;[1] the glasses shown in the first of the four pictures of *The Election*, "The Entertainment," and in some of the *Rake's Progress* series by Hogarth, all in the Soane Museum;[2] and, as to the end of the century, many of the tail-pieces by the incomparable Bewick.

Group VI. Glasses with Opaque-twisted Stems—Bell.

Continuing the group of bell glasses,[3] we now return to them under a new aspect, namely, with bulbed and straight stems, with white and coloured twists, in the place of the necked and bulbed, and drawn air stems of earlier years. The method of the manufacture of a simple opaque white twisted stem was as follows:[4]—

A cylindrical pottery mould of about 3 inches high and $2\frac{1}{2}$ inches wide was fitted around its interior circumference with a series of opaque white glass canes, alternating with rods of the same size in plain glass to keep them in accurate distance apart, all being further retained in place by a little soft clay at the bottom of the mould. This receptacle and its contents were then heated up to the point when melted glass might be safely introduced into the void space in the middle. The hot canes adhering to the molten metal, the whole was withdrawn from the mould, re-heated in the furnace, and the canes drawn together at one end by the pincers; the cylinder was now revolved and prolonged to the proper distance, and

[1] The headpieces of *The Happy Toper*, vol. i. p. 31; *The Jolly Bacchanalians*, vol. i. p. 37; *My Jolly Companions* (2), vol. i. pp. 68, 69; and *The Toper's Sentence on a Sneaker*, vol. i. p. 169, show in what a determined and systematic way, with glasses, pipes, and punch bowls, the society of the time set themselves to the business. A rather poor Silesian glass of this date, which formed part of the collection of the late Mr. Soden Smith, has engraved upon it a scene of two well-dressed men, in long periwigs, sitting drinking with drawn glasses at a round table with this inscription above them: HET WELL WEEREN VAN DE GODE VRIENDEN (Fig. 85, *sup.*); on an ogee English glass, about 1770, in the possession of Mr. J. Hodgkin, is represented three rude men smoking long pipes and drinking with heavy drawn glasses at a square table; round the rim is the needless injunction: KEEP IT UP (Plate 46).

[2] Some tavern glasses of the time are shown in Hogarth's illustrations to his *Five Days' Peregrination*, 1732. The glasses in Clint's pictures at the Garrick Club, of scenes in plays, are well painted but not historically accurate.

[3] See pp. 258, 260.

[4] See Introductory Notices, pp. 32, 60.

THE HAPPY TOPER.

THE JOLLY BACCHANALIANS.

MY JOLLY COMPANIONS.—1.

MY JOLLY COMPANIONS.—2 "GLASSES TURN DOWN."

THE TOPER'S SENTENCE ON A SNEAKER.

43.—"CALLIOPE."

a twisted stem of the required thickness, of opaque white filagree, was the result. It is obvious that by varying the positions of the canes, opaque, coloured, or plain, and manipulating as described, twisted rods of endless variety could be produced.

By applying a cane to the side of a nucleus for the central mass, covering it with clear glass, and introducing the whole into a circular arrangement of canes, a wavy line within spiral twists was produced, alternately approaching and retiring to and from the centre of the stem in accordance with the original eccentricity in the mould of the cane in question.

The tape-like spiral bands which occur in the stems of many of the bell glasses, engraved with vine leaves and grapes, roses, and other flowers, were formed by placing one or two flat canes against the side of the mould, adding one or more eccentric canes for the central twists, and working as before. The late Mr. Hartshorne collected some beautiful engraved examples of glasses with these stems.

The succession of open globular figures, formed of lines, like armillary spheres, and occupying the whole width of a stem, was produced by enclosing a certain number of canes in a flat *paraison* or glass case, setting it upright across the mould, and proceeding as before. This pattern was used in the stems of bell-shaped glasses both foreign and English, and was continued here in other glasses far into the present century; it is capable, like the others, of endless variety, both by adding white or coloured canes round the mould, and by modifying their positions.

With these general descriptions in his mind, the collector can readily see for himself by what process any twisted stem was formed. Further, by making himself thoroughly acquainted with the patterns in the stems of glasses well known to be English—such as the straight-sided and the fluted, which had few correspondents on the Continent—he will soon recognise the distinguishing characteristics of those of the Low Countries. There were certain designs of twisted stems which came to be peculiar to England; others were essentially continental; and others, again, very few, are found with glasses of both countries. This is as might be expected, and there is no reason for thinking that lengths of opaque-twisted stems were imported from Venice, or from Holland, or France, for service in English glasses; there was no mystery or difficulty in their manufacture, and they were largely made in the north of France during the eighteenth century.

It is clear that a great number of the opaque-twisted stemmed glasses that are now met with in England are not English. The non-existence of a Law of Primogeniture in Holland has brought about the breaking up of old houses, and,

as every one knows, the arrival in England for many years past of seventeenth and eighteenth-century Dutch furniture—a continuance, but in a different spirit, of the commercial traffic between England and the Low Countries which dates from the Middle Ages. Naturally the glasses have come also, and among them a quantity of a very inferior kind, fit only for the odd table decorations known as "specimen glasses."[1] It appears also that many opaque-twisted and coloured-stemmed bell glasses were imported during the latter part of the eighteenth century. Their stems generally bewray them, for they were frequently of marked complexion such as were never made in England (Fig. 209). Some of them

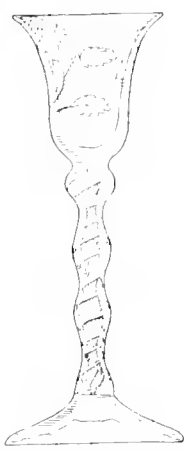


FIG. 209. (One third.)

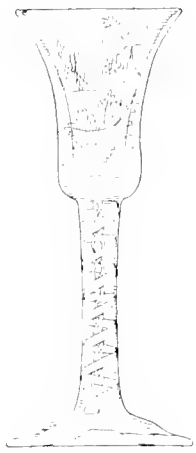


FIG. 210. (One third.)

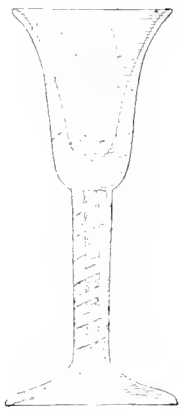


FIG. 211. (One third.)

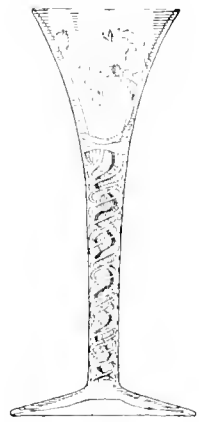
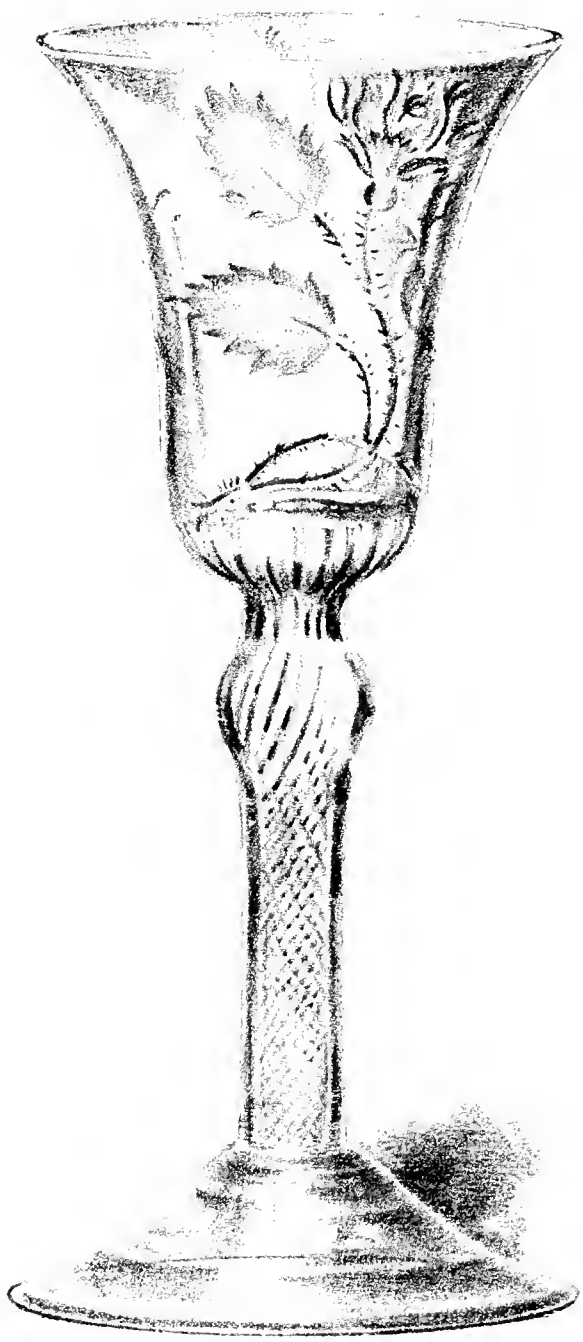


FIG. 212. (One third.)

were imported plain, and engraved here with the heraldic Stuart rose and natural buds, and with vine leaves and grapes and the hovering bird (Fig. 210); others came ready decorated with vines, and with natural roses, the sunflower, the foxglove, and the rose of Sharon (*Hypericum Calycinum*), popularly known as the Hanoverian rose and the large-flowered St. John's-wort (Fig. 211), also found upon English glasses, and far into the present century. Precisely thus was it also as to drawn glasses with opaque twisted and coloured stems—a fashion probably

[1] When the late Mr. Hartshorne and Mr. Albert Way—who were, perhaps, the earliest of modern antiquaries to recognise the merits of Old English wine-glasses, and used no others at their tables—made their collections together more than half a century ago, "rose glasses" could be picked up for a shilling, or even sixpence apiece. Those halcyon times are long since gone, and there is no very hopeful prospect now for genuine collectors, who find that a rational pursuit of knowledge is in danger of being sapped or destroyed by a fashionable craze for possession.

It is probable that, in addition to old glasses having been discarded from time to time throughout the eighteenth century on account of change of fashion, or as remnants of sets of dozens, or of half-dozens, many were part of the old stock of glass-sellers never "set" for sale, and turned out at last as unmarketable and of no value, while others lingered forgotten in the recesses of old houses, to be at last routed out by a new-fangled housekeeper. These circumstances would account for "rose glasses" and others of equal interest being finally discovered unscathed in the corner cupboards of cottages, and for the perfect condition of numbers of twisted stemmed wine, punch, and cordial water glasses of all kinds from the same humble sources.



44.—ENGLISH GLASS.

never made here,[1] but imported plain and engraved (Fig. 212). The commoner sort of continental bell glasses are easily detected, but those of the better kind, chiefly from Amsterdam, Brussels, and Liège glass-houses, run our own very close, both as to brilliancy of metal and purity of stem; and there are many that must come under the eye of the collector whose nationality can with difficulty be appropriated without an intimate acquaintance with both English and continental examples.

Again, as to the possibility of lengths of opaque white twisted and coloured rods having been imported from the Low Countries to Bristol, and elsewhere in England, for use in the stems of glasses, the English glass-makers had pushed this branch of the art to so much higher a point of excellence than that to which the Flemish and Dutch makers had reached, that such a trade seems very unlikely. Moreover, no typical English glasses have been noticed with the essentially Dutch ruby and white stems, which would certainly have come over with the others if such importation was carried on. We must, therefore, conclude that the glass-makers on either side of the Channel and the North Sea worked in this respect quite independently of each other. It must be remembered that the art of fashioning twisted stems was not a difficult one after a little practice, and that our own superior metal was greatly in our favour. Obviously, the twisted stem work of the two countries being manipulated under precisely similar methods, the results must sometimes closely approach each other in character.

It may be stated here that the English opaque-twisted stems have far more variety than those of the Low Countries. Many of the English standards are embellished with the multiple or compound air spiral, on rare occasions with the addition of an opaque white cord twisted with it (see Fig. 183); with the open tubular corkscrew spiral of white, alone, as in a scarce and early example in the cabinet of the author—of very uncommon manufacture (Plate 44), apparently

[1] The opaque-twisted stemmed bell glasses of the latter half of the century, engraved with roses and other flowers, are almost invariably accompanied by an expanded butterfly, as with the air-stemmed bell glasses of earlier date. The butterfly also attends the sunflower, and the Hanoverian rose. A hovering bird is almost constant on the glasses engraved with vines and grapes, the bird is also seen with the foxglove; it long survived the butterfly, it was never well designed, and is found in a curiously conventional shape on the odd little sherry glasses of the last years of the century. The hovering bird, festoons, and vines, occur in the prim borders of Cipriani's bacchanalian designs engraved by Bartolozzi. By lapse of time the butterfly itself—whose set form surrendered more readily than that of the bird to the skill of the engraver—degenerated, in defiance of natural laws, into a moth, in which form it reappears on the beautiful cut glasses with faceted stems and delicate polished engraving of the time of Sir Joshua; then it vanished.

The engraving on many of the English glasses of the eighteenth century was oil-gilded, with very good effect, but not durable.

manipulated from the drawn shape—or with thicker white cords added; and with corrugated tape-like spirals, sometimes single with coloured edges, sometimes double, just like the writhing horn snakes of the toy shops, giving an appearance of great intricacy (Fig. 213). The glasses engraved with roses and with blue and white spiral stems are of great rarity and beauty as every collector must know. Nothing quite of these kinds were made on the Continent. On the other hand, the foreign stems, both bulbous, straight, and of the drawn form, exhibit manipulations with opaque white or many coloured twists with which we have nothing exactly to correspond, or of equal artistic value. Among these must be noted

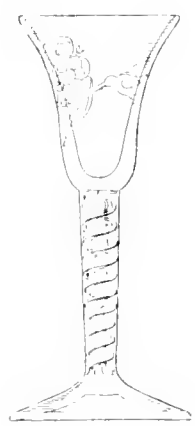


FIG. 213. (One third.)

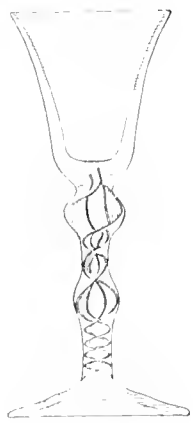


FIG. 214. (One third.)

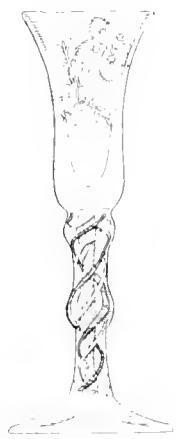


FIG. 215. (One third.)

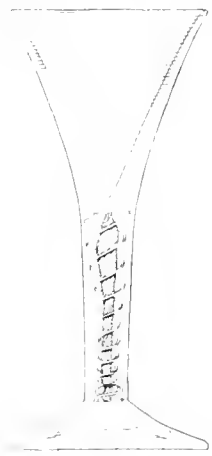


FIG. 216. (One third.)

the beautiful stems with emerald-green centres, and ruby-edged white corrugated spirals, in bulbous and drawn stems. These are about 1780[1] (Fig. 214).

The most usual attribute of the stems of the Low Country glasses is the slightly undulating hollow central tube of close white lines. It is a constant feature with the ruby and with the opaque white stemmed glasses, and in the bulbous standards widens and contracts according to the changes in the bulk of the stem. In the straight and bulbous standards of Low Country bell glasses of the end of the century the twists are frequently poor and imperfect, and of a dull white, the bell being often too long in the part which bell-founders call the "waist," and bad in proportion in consequence (Fig. 215); these should not be mistaken for English. *Per contra*, the Low Country glasses of drawn form—really made in three parts, as must be the case with

[1] Coloured stems were but little made in England save quite at the end of the eighteenth century. There was a revival later on of ill-proportioned glasses, with tightly-screwed twists of crude colours, with which we have, fortunately, nothing to do. Occasionally blue and white twists, sometimes with a feeble red line added, are found in small ogee and straight-sided glasses. One of the latter was produced, quite naturally, five years ago for the author's use in a small inn at Checkley, in Staffordshire, famous for its two astonishing early cross shafts, sculptured with great art with basket-work men, and its painted glass. This was an unexpected survival of service.

opaque-twisted stems — have much merit both of glass and stem work, the central tube of typical examples diminishing from the top to the bottom, and having two thick white cords revolving spirally around it with excellent effect (Fig. 216). Many of these glasses came from Liège; the metal has a good ring, and only the straight tubes in the stems, apart from what might be shown by chemical analysis, announce their origin. The central hollow twisted tubes in the ruby and white straight and bulbous stemmed glasses already alluded to are usually of poor quality, as are also the ruby twists in the glasses of the shape which our forefathers — appreciative of the Methuen Treaty of 1703 — consecrated to what that industrious antiquary and honest Jacobite, Thomas Hearne, called "good solid edifying port."

Twisted stemmed glasses continued to be made in England, ever decreasing in number, until about 1830—the latest having pressed, or broken-fluted bowls, and the mark of the pontil on the bottom smoothed away; the long languishing trade demand for them then ceased. They have been reproduced in small numbers up to the present day to make up sets for persons of taste, but these are generally easily identified.

During the last few years a number of bell glasses, with cast or moulded feet much less in diameter than their bowls, and the stems straight, or with a single knop, have been sent to England from the Low Countries, or possibly from Germany, having regard to the eagles rudely engraved by the wheel, together with coarse foliage, on some of them. The stems are of opaque-white twists of many threads, sometimes with thin pale ruby lines added, all very imperfectly worked, and always twisted in the reverse direction to that of the old glasses, which invariably follow the line of the corkscrew of commerce; the bowls have no ring whatever (Fig. 217). When these miserable productions first came to London about 1890, they did not attract the collecting public — "cautela non nocet"; but later on a large quantity appeared in East Anglia, and had a rather better fortune.

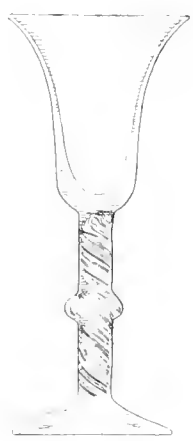


FIG. 217.
(One third.)

As soon as a series of things has taken the fancy of the rapidly-increasing number of the public which collects because it is a kind of fashion, we may expect to find the demand supplemented by forgeries—if objects in glass which can hardly deceive anybody may be so called—because genuine examples of old glasses can only exist to a limited extent. As with old English silver-plate, or Chelsea china—not to touch upon the glaring question of forgeries

in those directions—the taste for collecting old English wine-glasses has also received a great impetus during the last few years; and complaints arise naturally now on all sides—within the author's knowledge from Penzance to Glasgow—of the difficulty of procuring examples, and of the rapid upward movement of the prices, at present, in fact, almost prohibitory, even for very poor examples. Fortunately the generality of the old English glasses are not quite easy to imitate, and lack of knowledge as to their history, of familiarity with their characteristics, and of information as to which glasses are English, has been against the insidious industry. Moreover, the artist has been slain by the artisan in the craft of glass, as in many others. These conditions will help to keep the market pure, but the prices must continue to rise.[1]

There is some reason for believing that twisted-stemmed glasses in imitation of the old are being made in a private glass-house in the Potteries. They ought to be readily recognised.

Shortly before consigning this work to the press, two portrait Jacobite glasses came under the author's notice, the price of each being £4! They were quite modern copies of the Shrewsbury Court-House and the South Kensington Museum portrait glasses; information has been received of other similar glasses which have also been lately sold to unwary collectors. As we have said, lack of familiarity with their characteristics, as well as with the treatment of certain details, which we shall not define here, will assist in protecting the collector.

With final regard to the English bell glasses, some beautiful examples were made in the last quarter of the last century, with somewhat hard coloured stems. They never have folded feet, and the limit of their range is indicated by the rough centre under the foot where the glass was knocked off the pontil when finished. The latest examples, with which we pass out of the century, have this roughness ground away, the stems thin and tightly twisted—the *screw* being communicated to the surface of the outside, as in modern examples, or with attenuated white lines, and the feet very flat and less in diameter than the rims of the bowls—a fatal error in modern design into which the old men never fell.

[1] In 1891 the author was told by a dealer in the West of England, to whom he was unknown, as a reason for the high price of some old wine-glasses, that "Mr. Hartshorne is writing a book upon them." Such was the untoward result of a notice in *The Athenæum* copied by country papers.

CHAPTER XVII.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED — GROUP VII. STRAIGHT-SIDED GLASSES — GROUP VIII. OGEE GLASSES, FLUTED OGEE, AND DOUBLE OGEE GLASSES.

Group VII. Glasses, Straight-sided.

Among the numerous English glasses which come under the scrutiny of the collector, those of which many of the bowls are, strictly speaking, reversed truncated cones, but which, for the sake of a comprehensive nomenclature, will be spoken of as straight-sided glasses, fill a large space. The manipulation of many of them was allied, as will be seen, to that of the drawn glasses, inasmuch as in their simplest form they could be made in two parts.

Hitherto we have been a little hampered by the fact of the bell glasses and others having been made on the Continent as well as in England, and by the interpenetration of forms closely allied to each other. We shall now treat of a series which is essentially English and has few analogues abroad, and its consideration may well follow the bell glasses, because those with straight sides endured for almost exactly the same period, and, like them, had their two phases of bulbed and simple stems. The bulbed stems, those shouldered, or with a shoulder and a knop, are the earliest, and are coeval with the air-stemmed glasses, with the same shaped stems which have been spoken of under another head. To this class belong also some of the better sort of household and tavern glasses of the golden age of English literature, such as Addison and Bentley and Steele would have used, and which must have been common in all the good old country houses throughout the kingdom — the larger kind being for wine and punch, and the smaller for ardent waters. All of these are of brilliant dark metal, and with their

invariable accompaniment, the folded foot, often a third more in diameter than the rim. The absence of the fold in the feet of the air-stemmed glasses alluded to above has been already mentioned as noteworthy.

The bowls of the straight-sided glasses were not often engraved until after the middle of the century, when the quasi-heraldic roses were giving place to less conventional ones, and to other flowers sometimes only crudely shown. On these glasses first appear the conventional flowers with large seeded centres, decorations which had a long run and were still in use quite at the end of the century on common port and white glasses. It is a necessary condition of the straight-sided glasses with twisted stems that they should be fashioned in three parts—bowl, stem, and foot—the standards appearing in the different fashions which have already been alluded to, namely, the air-stems, simple and compound, and the numerous varieties of the opaque-twisted stems made in England. With plain stems these glasses were, of course, made easily, and perhaps sometimes after the drawn manner when they approach the form of the ogee glass, which will be treated of in its place.

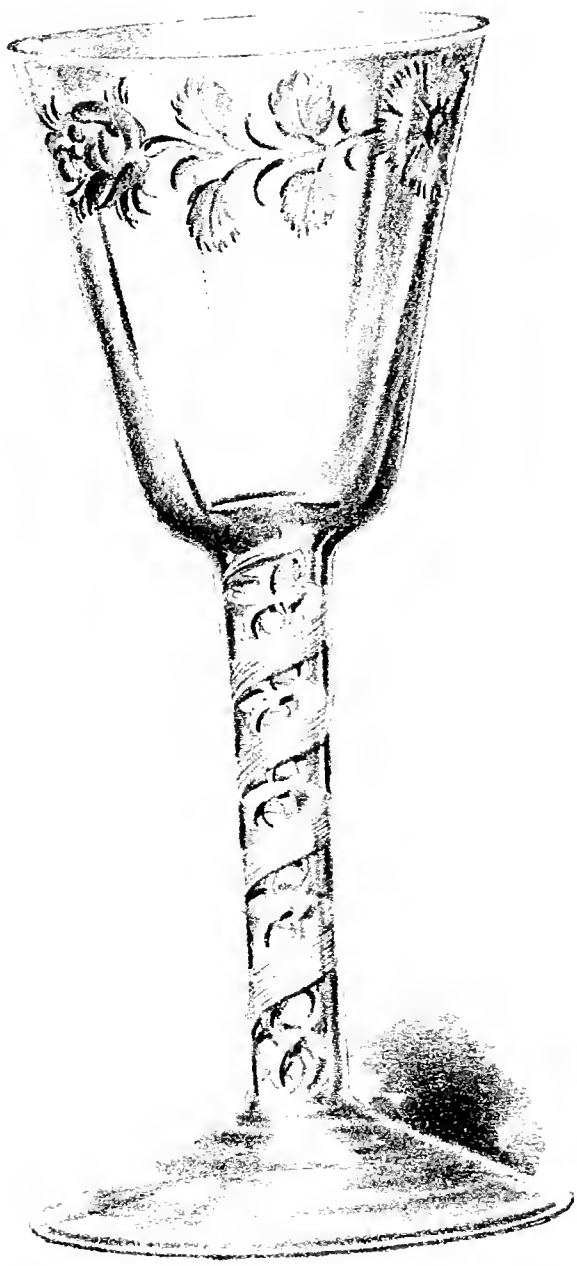
On the best of the straight-sided glasses the engraved flowers are boldly and deeply cut, and sometimes oil-gilded, and their character foreshadows the beautiful polished engraving of another group which came later. It is in connection with the straight-sided English glasses that natural flowers occur more than in any other kind, and they have a certain additional value accordingly.[1] This is apart from the natural buds of the conventional roses. To this series also belongs a small and curious group with horizontally corrugated bowls, of which all the examples that have been noticed come out of Norfolk, possibly deriving from a glass-house at Lynn or Norwich[2] (Fig. 218). A few rare examples of straight-sided glasses have fluted bowls, and will be included under another group. A plain sealed-glass is here illustrated[3] (Fig. 219).

Allusion has just been made to the earlier examples of the straight-sided glasses for tavern and ordinary household use, with their knopped and shouldered stems and folded feet; six unusual examples, engraved with arabesques, are in the collection of Mrs. Shipman (Fig. 220). Those of a

[1] In the "Keep it up" glass already alluded to (footnote, p. 270), a glass tobacco tray is shown on the table. Such a dish in the cabinet of the author is engraved with a rose, a tulip, and a sunflower, treated in exactly the same manner as the flowers on the straight-sided glasses. In the numerous convivial pictures in *Calliope*, 1739, the tobacco is always on a piece of paper opened out flat on the table.

[2] See p. 251.

[3] See p. 241 (footnote).



45.—ENGLISH GLASS.

better and later kind which have been mentioned, with straight opaque-twisted stems, have great merit, the natural flowers — the rose (Fig. 221), the lily of

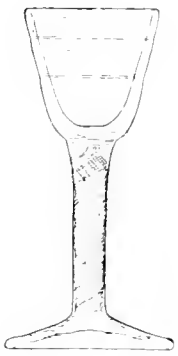


FIG. 218. (One third.)

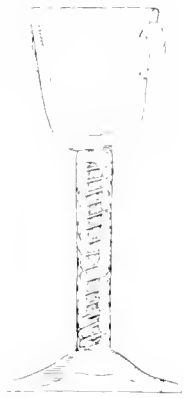


FIG. 219. (One third.)

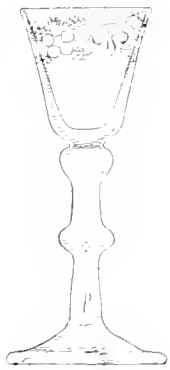


FIG. 220. (One third.)

the valley, the tulip (Fig. 222), the honeysuckle — being well expressed. The butterfly and bird are not constant features of these glasses. Such a rose glass

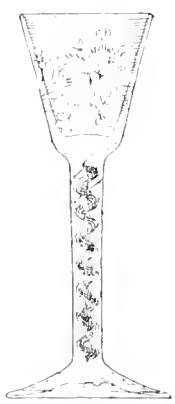


FIG. 221. (One third.)

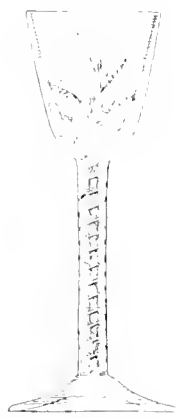


FIG. 222. (One third.)

FIG. 223 (One third.)

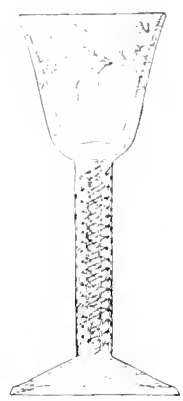


FIG. 224. (One third.)

in the possession of Mr. A. Wallis has an undoubted history and the value of a dated example[1] (Plate 45). Mrs. Wilmer has an excellent rose glass with

[1] It is one of a dozen which belonged to the Rev. H. Cantrell, Vicar of St. Alkmund, Derby, who had a number of Prince Charles Edward's Highlanders billeted upon him in Derby, 4th December 1745. The four glasses now remaining have come down in the family by direct descent.

A straight-sided glass in the collection of Mr. A. Wallis is engraved with a rakish-looking ship in full sail, and inscribed, "Succefs to the EAGLE FRIGATE JOHN KNILL COMMANDER." From a search kindly instituted by Mr. H. Hall among the Navy Papers in the Public Record Office, it appears not only that no vessel named *The Eagle* in the Royal Navy was commanded by John Knill between 1660 and 1818, but no such officer's name occurs in any of the Lists and Books. There were several *Eagles* in commission during this period, and their books agree with the officers' Lists, etc. It follows, therefore, that the glass has the unusual interest of commemorating a privateer, and the words of the inscription are consonant with this view. The "Success" glasses are the parallels of the Low Country "Welwaaren" glasses. Here, as there, we have "Success to Agriculture," to the fruit-trade, hunting, etc.; and political and personal felicitations, as well as denunciations of unpopular measures and men, just as on china and earthenware. On 31st December 1798, "A large Goblett fluted bole & lettered 'Success to Renishaw hair hounds'" was procured by Sitwell Sitwell, who kept harriers, from a glass-house at Whittington, near Chesterfield. This was one of the countless furnaces which arose during the eighteenth century.—Renishaw Bills in the possession of Sir G. R. Sitwell, Bart.

a very pale violet-tinted twisted stem. This characteristic of colour has been observed upon other stems of glasses, and is due, perhaps, to a metallic oxide imparted by the pottery mould during the fashioning of the twisted stem. In the cabinet of the author are examples engraved with vine leaves, grapes, and bird, and inserted air-twisted stems (Fig. 223), and others with the natural rose and butterfly (Fig. 224). The air stems seldom occur with these glasses; Lord Torphichen has a curious example, with the stem formed of outer spirals of three and one alternately round three wavy perpendicular cords, all air lines; the bowl is engraved with a man hanging from a gibbet,[1] with

FIG. 225. (One third.)

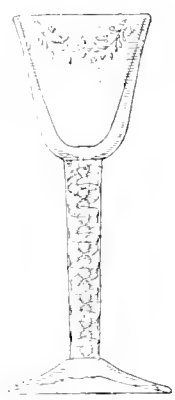


FIG. 226. (One third.)

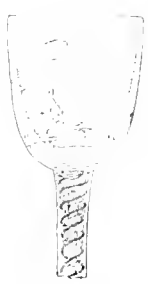


FIG. 227. (One third.)

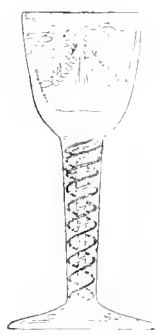


FIG. 228. (One third.)

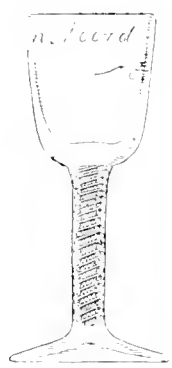


FIG. 229. (One third.)

the initials "A B," and the words, "THE COWARD'S REWARD" (Fig. 225). The initials indicate that this glass is in vulgar allusion to the unfortunate Admiral Byng, who was sacrificed to political clamour, and shot for cowardice in 1757. Posterity has amply vindicated both his courage and his honour.

In the collection of the Rev. S. Mayhew is a glass well decorated with festoons of flowers in white enamel (Fig. 226)—no doubt, like many others of this group, from a glass-house at Bristol, unless it comes from the flint and enamel glass-furnace advertised in *Felix Farley's Journal* of 16th October 1764, as having been opened at Chepstow. Mrs. Wilmer has an extremely pretty example of the shape taken to be for mumm, festooned with arabesques; and Mr. H. Willett has some glasses decorated with the seasons in white enamel. A set of six in the drawn form, with opaque-white twisted stems of many threads, in the possession of the author, have the rims similarly decorated with vine leaves and grapes. Their date is about 1790; they were obtained in Amsterdam, where in all probability they were made.

While the straight-sided glasses were being made in England, others something akin to them, but with full-bottomed rounded bowls and twisted stems, whose

[1] For gibbets, see *Hanging in Chains*, ut sup.

style clearly distinguish them, were produced in the Low Countries. Many of these with ruby stems were beautifully engraved with flowers (Fig. 227), and later with festoons (Fig. 228). A typical example in the cabinet of the author, with an opaque white twisted stem and the usual tubular central twist, is engraved round the bowl with the diamond point—"het welvaren van Moordreyt," and on the foot—"anno 1790" (Fig. 229).[1]

As with other English glasses, those of the group which has been under consideration became at the end of the century, and after it, thin and light, and have tightly twisted, or rather screwed, and sometimes garishly-coloured stems—the twisting being communicated as spiral lines to the metal outside the stem, a sure sign of over-wringing—and thin narrow feet, with bowls cut into wide flat flutes—objects, in short, which the well-balanced collector can only think of with a shudder. It is with the straight-sided glasses of about 1770 that stems with blue in the twists sometimes occur, and many of this time have air-twisted stems, but seldom of quite satisfactory make. This art was then in its decadence; indeed, inserted air stems never had the brilliancy and regularity of those of drawn glasses.

Group VIII. Glasses, Ogee, Fluted Ogee, Double Ogee.

Somewhat allied in form to the straight-sided glasses, and like them of purely English origin, are the ogee glasses. With the exception of the long-descended tavern and ordinary household glasses, to which, as a matter of fact, each special group contributed in turn its quota as regards form, no series is more distinctly English, or more copiously represented at the present day, than those of which the bowl at its junction with the stem takes the Ogee line.

From the fact of by far the greater number of these glasses having opaque-twisted stems, it would appear that the oldest are not much earlier than the middle of the century. That a large proportion of them were made in Bristol is borne out by several facts. It is recorded by Houghton that in 1696[2] there were nine glass-houses in and about Bristol, three of them making flint glass. This shows

[1] A dated glass of this kind is very rare. It probably commemorates the appointment of a burgemeester. Moerdreyt, or Moerdyck, is a village on the confines of North Brabant, where passage was formerly taken across the Maas into the province of Holland. It is known to history by a curious accident—the drowning of Prince John William of Orange, Stadthouder of Friesland, in 1711. While making the crossing on the pontoon, seated in his coach, to which he had retired on account of the rain, the prince was disturbed by the noise of his attendants without. Leaning out of the window of the coach to give orders for silence, the door flew open, and His Highness fell straight into the water and was drowned, together with Colonel Ginckel, who sat at his side in the carriage, and gallantly sprang to his master's rescue.—See *Les Délices des Pays Bas*, vol. v. p. 108, edit. 1786.

[2] See Appendix, Original Documents, No. XXXIII.

the early establishment of flint-glass making in Bristol, but does not affect directly the vessels in question. It is stated by Evans[1] that in 1761 the number of large glass-houses was fifteen. These announcements imply at least a century of practice in glass-making at the latter date; indeed, Dud Dudley speaks of an Italian glass-maker named Dagney, from Bristol, having been employed under the Protectorate in the attempt to work out a new scheme for smelting iron with coal. In the Commonplace Book of Alderman Pembrock, Mayor of Cork in 1733, it is entered that Nat Barry bought for him in Bristol in 1725 some dozens of glasses of different kinds.[2] These were evidently so obtained because they could not be got in Ireland. Mr. Owen gives the names of five firms of glass-makers in Bristol between 1762 and 1787;[3] it must have been from some of these sources that many of the ogee glasses under consideration emanated.

Connoisseurs, in better times than the present for collecting, have obtained the greater part of their glasses of the ogee form from cottages and old shops in the West of England; and in a varied collection of about a hundred and twenty glasses, so brought together by Mr. Singer from the district of Bristol, the ratio of ogee glasses is close upon one-third of the whole, and of straight-sided and air-stemmed glasses about one-tenth respectively. These conditions, which are not alone due to the popularity of a particular shape—because people are apt to buy blindly what the glass-makers choose to provide—tend to localise a large proportion of the glasses now under our notice to Bristol, in spite of the paradox that there is nothing more misleading than facts, except figures; and to point to other principal sources of origin—Newcastle-on-Tyne, Stourbridge, London—for the air-stemmed and straight-sided glasses. But we are far from saying that so simple and popular a shape could not have been, and, indeed, was not made in any glass-house in its common tavern and household forms, with which the folded foot is found; the varieties of type being due, as has already been suggested,[4] to the manipulations of different makers. Yet the better sorts were evidently principally made in Bristol and with unfolded feet. There was a glass-house at Whittington, near Chesterfield, during the latter part of the eighteenth century where good table glass was produced.[5]

[1] J. Evans, *Picture of Bristol*, p. 93, edit. 1818.

[2] Sept. 3, 1725—

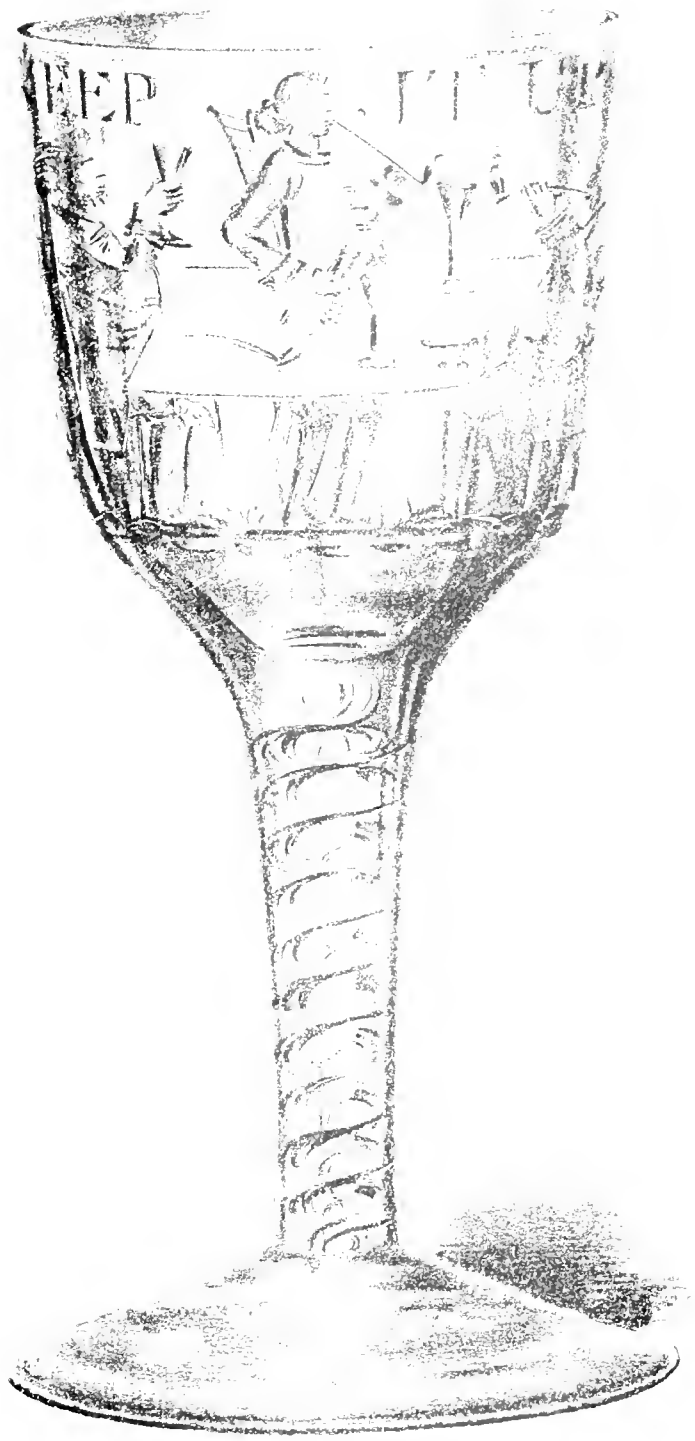
2 doz. glass saucers for holding sweetmeats at 4s. 4d. per doz.
4 doz. glass fruit baskets at 6s. 8d. per doz.
6 doz. jelly glasses at 1s. 9d. per doz.
2 doz. whipt-sillibub glasses (no price given).

(*Notes and Queries*, 5th S., p. 381, 1875.)

[3] Hugh Owen, *Two Centuries of Ceramic Art in Bristol*, pp. 379-387. In 1872 there was no glass-house in Bristol of any importance, the trade having gone northwards to the great coal-fields.

[4] See p. 251.

[5] See Appendix, Inventories, No. XI.



46.—ENGLISH GLASS.

The earliest of the ogee glasses, namely, those just previous to the middle of the century, have inserted air stems, with a knop, as in the early straight-sided glasses, and the bowls sometimes engraved with arabesques (Fig. 230). The form of the glasses of this group did not lend itself readily to the shouldered stem, but a few glasses with compound standards take this form.

Occasionally lipped and knopped ogee glasses are met with (Fig. 231). They were also made in the Low Countries, and all are of the last quarter of the century. Perhaps this form was derived from the Continent, but the Low Country versions are not accurate correspondents of the English examples. The ogee shape reappears with the greatest success among the cut glasses.

It is with the ogee series that large versions of the wine and punch glasses first appear, inscribed for use in the abounding draughts in honour of popular

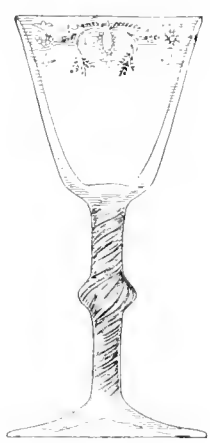


FIG. 230. (One third.)

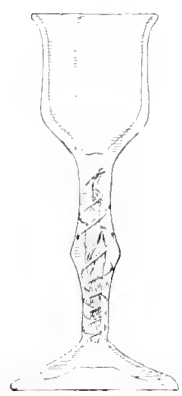


FIG. 231. (One third.)

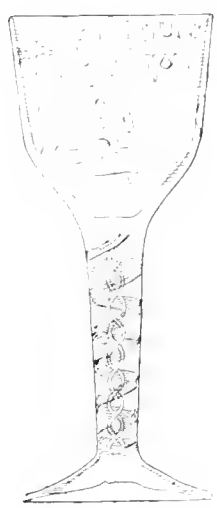


FIG. 232. (One third.)

naval heroes such as Vernon, Anson, Boscawen, Hawke, Rodney, who was honoured by decanters being named after him—a sure sign of popularity[1]—Howe, with his ship *Queen Charlotte*, and the immortal Nelson. The inscribing of goblets in commemoration of victories, naval and military captains, political celebrities, local events, parliamentary contests, etc., was a fashion also adopted by the china makers. A glass in the collection formed by the late General Fraser, V.C., with an opaque-twisted stem, is engraved with a seated figure of Britannia, two ships at sea, and the date 1759; round the rim is inscribed SUCCESS TO THE BRITISH FLEET (Fig. 232). This refers to Hawke's defeat of the French in Quiberon Bay, 20th November, in the above year. The KEEP IT UP glass in the possession of Mr. J. Hodgkin is of the same form illustrating a different sentiment (Plate 46). "Hero glasses" were made as a matter of course long into

[1] See Appendix, Inventories, No. XI.

the present century, for bravery is the most popular of virtues, and never goes out of fashion.

While the general character of the engraving on the ogee glasses does not differ from that of the straight-sided glasses—save in so far as many of this large series must have come from other centres of manufacture than Bristol, and therefore exhibit some variety—it is apparent that fewer ogee glasses were so decorated; perhaps the curved surface did not offer so ready a field. The conventional rose is very seldom seen except lingering on the plain-stemmed late Jacobite glasses, with the "word" of the Cycle, and emblems, and on some few others, together with a belated butterfly of earlier days. A glass in the possession of Mr. E. Jewitt has the

FIG. 233. (One third.)

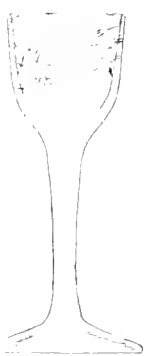


FIG. 234. (One third.)

FIG. 235. (One third.)

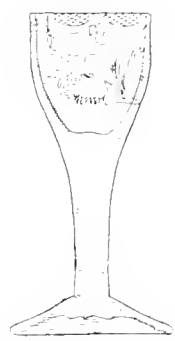


FIG. 236. (One third.)

natural rose and thistle upon one stem; they have been oil-gilded, and possibly indicate a long posthumous gratitude for the legislative Union of 1706 between England and Scotland, attempted a century earlier and again in 1670. The character of the engraving is unusual, and is perhaps Edinburgh work[1] (Fig. 233). We find in the ogee series the same sort of natural flowers as on the straight-sided glasses, the butterfly rarely, but the hovering bird generally upon those with plain and twisted stems engraved with vine leaves and grapes, as in an example in the author's and Mr. Singer's collections respectively (Figs. 234, 235). Towards the end of the century these glasses are decorated with leafy sprigs and festoons, as in the china, the furniture, and the incessant oval panels of plaster-work of the time, and with hard conventional flowers with cross-barred centres rudely engraved, and marking the vanishing of the heraldic rose. Examples from Mrs. Wilmer's and the author's collections illustrate the latter phase (Figs. 236-238). Among the stems of the ogee glasses the blue lines sometimes occur.

The ogee series having no true correspondents on the Continent, the nearest to them are the short, plain, or engraved ruby and opaque white twisted-stemmed

[1] A drawn glass in the possession of Mr. J. C. Ford is similarly engraved, and has the very unusual feature for this shape of a fluted stem. See Fig. 360.

Dutch glasses of the "port" shape made in four sizes, plain and engraved, the largest being excellent both for use and effect (Fig. 239).

Apart from the marked individuality and the long duration of the shape,

Fig. 237. (One third.)

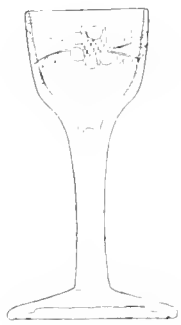


Fig. 238. (One third.)

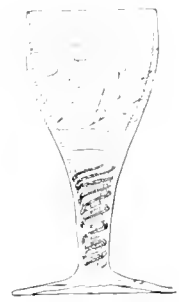


Fig. 239. (One third.)

and the absorption of the normal form into the cut glasses, and its survival into the present century, the ogee series has importance from the groups which are immediately associated with it.

Glasses, Fluted Ogee (VIII.)

The fluted ogee glasses with air, opaque-twisted, and plain stems have much brilliancy of effect. They were not engraved on account of the uneven moulded surface of the bowls, but the edges of the better kind were gilded with vines, etc. Examples from the cabinet of the author sufficiently illustrate this group (Figs. 240, 241). Like some other shapes, the fluted glasses were popular for cordial waters, and we shall meet with them again. The latest of these wine-glasses have broken flutes and little artistic merit, and soon after 1800 the flutes took refuge in the short ale and grog glasses of inns, being then oftener cut than pressed.

Fig. 240. (One third.)

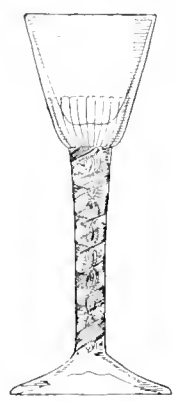


Fig. 241. (One third.)

Glasses, Double Ogee (VIII.)

This is a series of great interest and peculiar form which, for want of a better descriptive name, it is proposed, with some hesitation, to classify as Double Ogee glasses. Like the fluted examples, they were apparently chiefly produced at Bristol. Such glasses, with the rare exceptions of a larger capacity, were only made of the usual size for wine or punch; they never appear in a smaller form for ardent waters. The oldest, of about 1730, have stems with bulbs, or a knop, and the folded foot,

the upper part only of the bowl being occasionally engraved with vine leaves and grapes, as in a glass belonging to the Rev. J. C. Eardley Field (Fig. 242); in a much later glass in the South Kensington Museum arabesques occur (Fig. 243). The double ogee line is naturally most emphatic in the drawn glasses of this class.

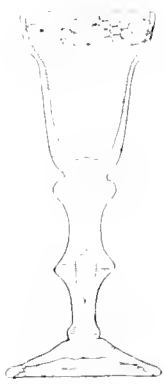


Fig. 242. (One third.)

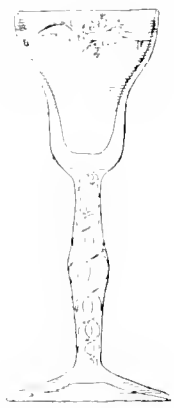


Fig. 243. (One third.)

Fig. 244. (One third.)

Towards the end of the century the compound air spirals, and the opaque-twisted stems, usually tapering from the top to the bottom with good effect, were almost invariably used.[1] Of such stems these glasses offer some of the best examples, and with them the lower ogee line at the junction, with the bowl, finally passes away. A glass in the collection of the author illustrates these characteristics (Fig. 244). Like the straight-sided and the ogee suites the double ogee glasses lapsed by a "gentle transfer" into another series which will now be treated of.

[1] Mr. J. A. Hyett has four sapphire blue double ogee glasses with knopped stems. They were probably made in Bristol about 1770, where much blue glass was produced; it is a shocking colour for any wine. But violently coloured glasses and drinking-vessels, which no evenly balanced person would use at the present day, had the sanction not only of classical antiquity and the Renaissance, but of the succeeding periods. René François, chaplain to Louis XIII. (1610-43), thus alludes to them in his *Essay des Merveilles*, referring to the fantastic shaped and coloured glasses produced in Murano:—"Le vin se sent tout étonné prenant tant de figures, voire tant de couleurs, car dans les verres jaunes le vin clairet s'y fait tout d'or, et le blanc se teint d'écarlate dans un verre rouge. Ne fait-il pas beau voir avaler un grand trait d'écarlate, d'or, de lait, ou d'azur?"—See Introductory Notices, p. 29.

CHAPTER XVIII.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED—GLASS-CUTTING IN MODERN TIMES—PRACTITIONERS IN GERMANY IN SIXTEENTH AND SEVENTEENTH CENTURIES—BOHEMIAN CUT GLASS—GROUP IX. CUT AND ENGRAVED GLASSES—GROUP X. CHAMPAGNE GLASSES—SWEETMEAT GLASSES.

GLASS-CUTTING.—The art of glass-cutting in modern times derives from sculptured works in rock-crystal introduced into Italy after the taking of Constantinople by the Turks in 1453. It was practised about a century later at Nuremberg, and some other places in Germany; and at the end of the sixteenth century Rudolph II. brought Italians from Milan to take control of the crystal and glass-cutting establishment which he had founded at Prague. It was there that Caspar Lehmann and Zachary Belzer worked from 1590 to 1622, the former dying in the latter year, having transferred the art of rock-crystal-cutting to glass, aided by an invention of his own.[1] Lehmann's pupil at Prague, George Schwanhard, of Nuremberg, returned to his country at the beginning of the Thirty Years' War, and, working with eminent skill at Nuremberg and Ratisbon, added to the cutting process the art of engraving with the diamond point, which was then being practised in Holland by the ladies of the Roemer Visscher family.[2] He died in 1667, leaving three daughters—Sophia, Suzanna, and Mary, who engraved glasses with flowers, arabesques, and inscriptions, and two sons—George, with some talent, who died in 1676, and Henry, an accomplished engraver of landscapes and inscriptions on glass; he long survived his brother, dying in 1693, and is stated to have discovered the process of etching on glass with fluoric acid. At this time also Stephen Schmidt and Hermann Schwinger cut and engraved glasses at Nuremberg with great success.[3] Many of the vessels operated upon by the above-mentioned veritable artists take the shell form, following that of the

[1] E. Garnier, *ut sup.* p. 273.

[2] See Introductory Notices, p. 48.

[3] E. Garnier, *ut sup.* p. 274.

rock-crystal cups, of which they were imitations. In a crystal block of the usual shape obtainable, the shell gave the fullest form to the vessel with the minimum of waste in the working, the stem or standard, and the foot, being in separate pieces, more or less enhanced by gold and silver mountings.[1] In the glasses the projections were "prise dans la masse," those of Bohemia being cast in wooden moulds for subsequent cutting and decoration.[2] At the end of the seventeenth century establishments were opened for cutting and engraving glasses at Vienna, and about 1710 at Berlin, where Anthony Spiller of Prague distinguished himself by his representations of battles, landscapes, and history pieces.[3]

A glass-house was first set up in Bohemia in the middle of the fifteenth century.[4] By the gradual increase of the industry, owing to the abundance of wood for fuel and ash, and of materials such as quartz and lime for the manufacture, Bohemian glass competed successfully with that of Venice before the end of the seventeenth century, in spite of Venetian endeavours to work after Bohemian ways, and shortly after almost broke up the long-descended refined traditions of Murano itself. The old artistic glass was rapidly going out of fashion, and the engraved crystal glass was taking its place. We have seen how the change began by the gradual introduction of English flint glass, and how it operated in the Low Countries.[5]

But the glasses with which Bohemia and Silesia flooded the markets of the Austrian Netherlands, under the auspices of Maria Theresa, were not of the best kind; it was impossible that artistic work could have been produced in sufficient quantity. The intruding glasses were therefore simply decorated with flat facets, or sent plain, and left to be further ornamented in the Low Countries, which was done in very inferior fashion.[6]

Bohemian glass now had a serious competitor in English flint glass.

[1] See p. 211.

[2] G. Bontemps, *ut sup.* p. 624.

[3] The late Dr. Fowler's strictures upon cut glass (see Introductory Notices, p. 40, footnote) seem hardly just. Both the Greeks and the Romans directed their genius to the cutting of the prized *crystallinum*, and with what surpassing success the bowls from Canosa, cut on the wheel, and decorated with gilt tracery strangely resembling the radiating patterns of thirteenth-century rose-windows, and other examples of the most refined beauty in the British Museum, sufficiently evince; to say nothing of the boat-shaped cups (ἄκατοι) cut out of the solid glass on the lathe, and the skilful "tours de force" of the *diatretarii*. The crystal and glass-cutting in Bohemia was rather a survival than a revival of the ancient art applied to both materials. And there can scarcely be impropriety in a practice which received in so marked a degree the *cachet* of antiquity. For the names and the manner of use of the various cups of antiquity, see *The Deipnosophists* of Athenaeus, a most interesting writer on account of the quotations which he introduces from ancient poets whose works are now lost.

[4] E. V. Czihak, *ut sup.* p. 6.

[5] See Introductory Notices, p. 40.

[6] *Ibid.*, p. 57.

Already in 1680[1] "Verres à l'Angleterre"—with reference to the metal, not the shape—had been made at Liège, and later at Ghent, Namur, and many other places, and when the English cut glasses themselves began to arrive in the Low Countries after the Peace of Utrecht, those from Bohemia and Silesia soon lost their ground and fell into disrepute, while English flint glass continued to increase in favour on the Continent, and in quality until about 1780, when the height of perfection was reached. The visible superiority of English over Bohemian cut glass is that flint glass when fashioned into prisms for lustres, which had so large a sale on the Continent, or in projecting facets on the glasses, has the same property as the diamond in breaking up or decomposing the light. This quality is not possessed by Bohemian glass, which has neither "fire" nor "colour," and of course not satisfactorily by rock-crystal, on account of its tendency to irregular refraction of the rays of light. With this knowledge the English glass-cutters arranged their work accordingly, and the most brilliant results were obtained.

Group IX. Glasses, Cut and Engraved.

It is doubtful if any glasses were cut in England before the beginning of the eighteenth century. Early examples, and particularly dated ones, must therefore very seldom be met with; and it is not to be expected that the practice of an art here, which only arrived in its decadence, resulted in any objects fit to compare with those which were produced at an earlier time in Germany and Bohemia by artists of repute. Nevertheless, the cut English wine and punch glasses, in the finest metal in the world, have good character, and many of the later ones considerable artistic value, and, like some other English series—the straight-sided and the ogee glasses, which are nearest to them chronologically—they have few analogues on the Continent.

As to the English cut glass of the early part of the century, it must be understood that the imitations, more or less close, of flint glass "à l'anglaise" in the Low Countries, and glasses of much the same thistle forms being fashioned at the same time in Germany, Bohemia, and in England, and all converging to one point—namely, the Low Countries—unite to make it a matter of great difficulty to disentangle them, or to give in a few words an idea of the situation in the early part of the eighteenth century. Touching now generally upon the English portion of the rather bewildering story, the broad facts can

[1] See Introductory Notices, p. 40.

only be pointed out; collectors will fill in the details by their own observation and experience.

While the heavily-moulded English wine-glasses, of the end of the seventeenth and the early years of the eighteenth century, were lapsing into those of smaller sizes for cordial waters, glasses of large capacity, with bowls in the thistle form, already spoken of,[1] appear here. It seems that the shape is Bohemian, and first came to the Low Countries with the glasses from Bohemia and Silesia after the Peace of Utrecht in 1713.[2] It was somewhat adopted by Low Country glass-makers, but they could not withstand the great foreign influx. The shape was accepted in England, but the work of glass-cutting was untried, and practice was needed, so that it was not until a few years after that English-made cut glass could successfully compete with the continental productions. A typical example of some years later, in rich dark glass, is in the author's collection, engraved with the Prince of Wales's feathers, and the cypher F. P. for Frederic, father of George III. He was created Prince of Wales 9th January 1729, being then in his twenty-third year, and the glass was probably made to commemorate that event (Plate 47).

It is doubtful if many glasses of this size and kind were made and employed in England; they were rather "verres de parade" than for service, and it has already been seen that others with ribbed, air-twisted, or heavily moulded stems, as well as those of a commoner sort, were in full use in the early part of the century. We have failed to gather information as to existing examples of glasses of the kind in question in the Low Countries, in support of the well-recorded fact that English glasses were imported there shortly after 1713. If any cut glasses were sent they appear to have become very scarce, or to have vanished in the Provinces, as in England, and, as a matter of fact, there is a hiatus both of information and of examples here as well as there.

But we do know that a change of shape had soon come about, and that the English cut glasses, of which the decorative character was quite unsuited to those of the bell shape, soon fell into the form of the ogee series, and so continued to the end of their course, running out at last in the early years of the present century.

Welcome and highly-interesting dated examples are provided by part of a set of large punch glasses, and two capacious glass bowls, 11½ inches in diameter and 6½ inches high, in the possession of Captain Stansfeld, made for his ancestor, George Stansfeld of Field House, Sowerby, to commemorate the passing of the

[1] See Introductory Notices, p. 41. [2] *Ibid.*

47.—ENGLISH GLASS.

Calder and Hebble Navigation Act, for making navigable the River Calder, from its junction with the Aire, to Sowerby Bridge, near Halifax, a distance of twenty-two miles—a work of great importance at the time, and which was surveyed and planned by Smeaton. It forms the connecting-link between the Aire and Calder Navigation from Wakefield to the Aire, and the Rochdale Canal which runs from Sowerby Bridge to the Duke of Bridgewater's Canal at Manchester, which terminates at Runcorn in the tideway of the Mersey. The nine existing glasses are all engraved alike, and bear the inscription—UP TO SOWERBY BRIDGE 1758, the Stansfeld crest, flowers, and an anchor and a golden fleece, tokens of hope and prosperity (Fig. 245). The punch-bowls are covered with emblematic engravings and figures, and inscriptions significative of the difficulties overcome, animosities cleared away, and rejoicings at the expected success of the undertaking. On one is inscribed—SMILE YE BANKS OF CALDER YOUR NAIDS LAUGH AND SING YOUR RIVER GOD CONGRATULATES YOU WITH UP TO SOWERBY BRIDGE 1758; and on the other—NOT ONLY UP TO SALTER HEBBLE THRO EVIL REPORT & GOOD REPORT AT LAST TRIUMPHANT WITH UP TO SOWERBY BRIDGE 1758.[1] There is reason to believe that both glasses and bowls were made in Newcastle, perhaps engraved by Felix Foster,[2] or by Giles at York, who also worked with the diamond point, and that there were originally twelve glasses for each bowl in consonance with Northern hospitality. The example illustrated is in the possession of the Rev. A. S. Porter, and it is apparent that the style of cutting exhibited by it can only have been developed by some years of practice.

Having thus seen the cut glasses established in the ogee form in the middle of the century, the next stage shows them with knopped stems, always hexagonal, and with the same series of deeply-cut three-leaved sprigs running up separately into the bowl, and forming a cresting or finish for the cut facets of the stem (Fig. 246). A curious hexagonally knopped glass with a lip, approaching the double ogee shape proper which is so seldom found, is in the possession of Mr. E. Jewitt, and has the cutting of the same character carried nearly to the top of the bowl (Fig. 247). The crested arrangement was shortly modified, and about 1780 we meet with the finest examples of cut wine-glasses both for

[1] The author is indebted to the courtesy of Mr. G. Stansfeld for much of this information.

A glass engraved with a view of Sunderland Bridge, opened 1796, is in the Rev. W. G. Searle's collection, no doubt made at Newcastle. It was a popular subject, and is often seen on earthenware jugs.

[2] A memorial glass, 9 inches high, in private hands, is engraved with a crowned bust in an oval surrounded by the inscription, MEMENTO ANNA REGINA · HONI SOIT QUI MAL Y PENSE; over the head two angels hold a crown of glory; on the bottom of the glass is inscribed, *Felix Foster Fecit* 1758.

metal and decoration, as in an example from the cabinet of the author (Plate 48). Mr. Grant is the fortunate owner of nine lipped and knopped hexagonal stemmed glasses, beautifully engraved round the rim with roses,

FIG. 245. (One third.)

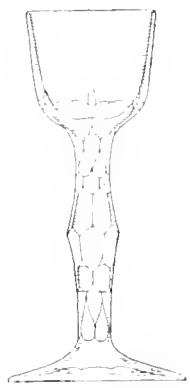


FIG. 246. (One third.)

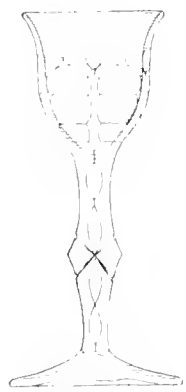


FIG. 247. (One third.)

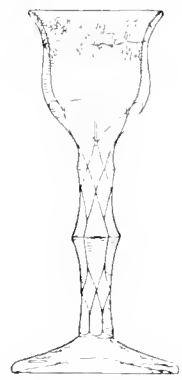


FIG. 248. (One third.)

carnations, cornflowers, and vines, all flourishing upon one wavy stalk (Fig. 248). They appear to have come to Lichborough about 1780. On the later glasses with straight, faceted, hexagonal, or pentagonal stems much excellent polished engraving is found, sometimes vases or baskets of roses and honeysuckle, and the attending butterfly of earlier times (Fig. 249), and occasionally a large goblet with a flat conventional rose of the latest type, recalling the crudities of modern

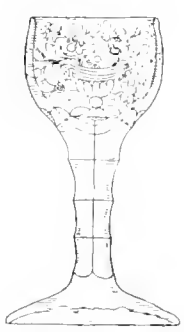


FIG. 249. (One third.)

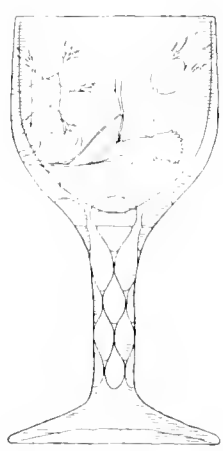


FIG. 250. (One third.)

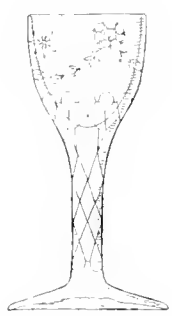


FIG. 251. (One third.)

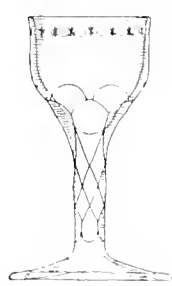


FIG. 252. (One third.)

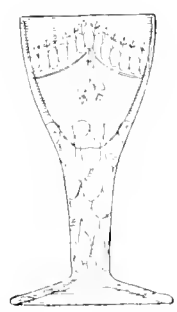


FIG. 253. (One third.)

"mediaeval" woodwork and "ecclesiastical" embroidery (Fig. 250). But the glasses tended to become smaller, and the cutting of the stems loose, shallow, and inartistic as the century advanced to its end;[1] some of the latest having the bowls decorated with festoons like much of the china of the time (Fig. 251), or

[1] A glass of the usual drawn form, engraved with a flower and with a knopped and hexagonally-cut stem, is in the possession of Mr. F. G. Buller Swete. The edge of the foot is shaped into a cinque-foil, and beneath it is written with a diamond point: Mary Dovaston 1801, and M D in a cypher. The date exactly accords with that of the glass.

48.—ENGLISH GLASS.

with borders of dead stars and polished indents, the former often touched with oil-gilding (Figs. 252, 253). Outlines of all these are drawn for convenience from the author's collection. They are not uncommon. In the cut wine-glasses of the extreme end of the century the facets developed into long flutes, and so the old ogee glasses lapsed into the respectable "port" and "white" glasses of our grandfathers. The cut glasses with heavy square feet can never have been seriously intended for table use at the end of the century when they appear. They will therefore be classified among the later glasses for punch and grog. Many large services of richly-cut glass—such as the Lion and the Vine services at Windsor Castle, of which a few pieces only now remain—faultless both as to "fire" and "colour," were produced at great cost in the last years of the last century. The noble appearance which they made upon the velvety oil-polished surfaces of the dark mahogany tables, over which the silver decanter stands glided so smoothly in the old hospitable days, when the pestilent French polish was not, is now, unhappily, but a dim recollection.

Group X. Glasses, Champagne, Sweetmeat.

It has been stated by Contant d'Orville [1] that in the sixteenth century the wine of Ay was so renowned that Charles-Quint, who "irrigated every repast by vast draughts of beer and wine," [2] Leo X., Francis I., and Henry VIII. sought after it, and that, according to a local tradition in the province, each of these rulers acquired land at Ay, whence a supply of champagne should be yearly despatched to them. This sounds rather Oriental, and there is no contemporary evidence in corroboration of such premature taste. M. Sauzay [3] quotes in support of it the existing tall Venetian glasses, and by analogy the "flûtes" of the Low Countries, none of which, it may be safely affirmed, are earlier than the last quarter of the sixteenth century, nor were made for champagne, but for "Rhenish," the High Country wine of the Rhine—a term not to be confounded with the "High Country" wine of Bordeaux from the Medoc district. Contant d'Orville's story is a mere fable.

As to a more reasonable account of the origin of champagne, it is related [4] that a monk named Perignon, in the Benedictine Abbey of St. Peter, Hautvillier, Champagne, who had charge of the vineyards, and the superintendence of the

[1] *Précis d'une histoire générale de la vie des François*, p. 66.

[2] Motley, *Rise of the Dutch Republic*, vol. i. p. 111, edit. 1861.

[3] A. Sauzay, *ut sup.* p. 122.

[4] *Notes and Queries*, 4th S., vol. xi. p. 37.

making of the wine in the seventeenth century, as a result of many experiments arrived at sparkling champagne. Like sensible men the House long kept the secret to themselves, but the wine is said to have been sent to Louis XIV. (1643-1715). That it did not arrive in Paris before the middle of the seventeenth century is not improbable, but from thence it would have slowly made its way into other countries.

Voltaire, writing in the middle of the eighteenth century, and speaking of the relation which the prosperity of the country bears to the luxury of the towns, says: "On a planté plus de vignes, et on les a mieux travaillés; on a fait de nouveaux vins qu'on ne connaissait pas auparavant, tels que ceux de Champagne, auxquels on a su donner la couleur, la sève et la force de ceux de Bourgogne, et qu'on débite chez l'étranger avec un grand avantage."[1] Voltaire gives no date as to champagne, but refers generally to the time of Louis XIV.

It is not a necessity of the case that champagne should have a particular shaped vessel dedicated to its use; but the custom of specialising glasses was so rigorously carried out in the latter part of the seventeenth century, as it is more than ever at the present day in Germany with the beautiful glasses from the Ehrenfeld works, that we may look for its observance in the matter of champagne, and willingly accept for it the tall glasses of the period, or those of moderate "flûte" form.

With regard to the time when champagne first came into England it was probably soon after the Restoration in 1660. An early notice of it is given in Etherege's comedy, *She wou'd if she cou'd*, first played 6th February 1668:—

> She's no Mistress of mine,
> That drinks not her Wine,
> Or frowns at my Friend's drinking Motions;
> If my Heart thou would'st gain,
> Drink thy Bottle of Champaign,
> 'Twill serve thee for Paint and Love-potions.[2]

In a later play, *Man of the Mode: or, Sir Fopling Flutter*, the same author alludes to the elevating effects of "sparkling Champaign." In Sedley's *Mulberry Garden*, first played 18th May 1668, Jack Wildish sends "for a dozen more Champaign" and certain other dainties; and in Otway's *Friendship in Fashion*, 1678, one of the ladies speaks of the merits of "powerful champaign, as they call it," indicating that it was not then much known.[3] In Butler's *Hudibras*, Third Part, first

[1] *Siècle de Louis XIV.*, chap. xxx. p. 423, edit. 1858.

[2] Act IV. Sc. ii.

[3] In G. Markham's curious receipts for "the ordering, preserving, and helping of all sorts of Wines" (*Way to Wealth, The English House-Wife*,

published in 1678, after the comical incident of the "prodigious flight" of the Knight and the Squire from the Enchanted Bower, Ralpho points out, with reference to running from the enemy that—

> when the Fight becomes a Chace,
> Those win the Day, that win the Race;
> And that which would not pass in Fights,
> Has done the Feat with easie Flights.
> Recover'd many a desp'rate Campain,
> With Bourdeaux, Burgundy and Champain.
> Restor'd the fainting High and Mighty
> With Brandy-Wine and Aqua-vitae.[1]

In 1699 Farquhar says, in *Love and a Bottle*, that "Champaigne is a fine liquor which all great Beaux drink to make them witty;" this shows considerable use of the wine; and in *The Twin Rivals*, 1703, by the same brilliant author, one of the characters says, with worldly wisdom enough, "Show me that proud Stoick that can bear Success and Champain!"[2] The last-mentioned date brings us to the century we are now concerned with, and by this time the wine was evidently fairly established here.

There is no reason for thinking that any "flûtes" were made in England for champagne on its first introduction, save, perhaps, by the Duke of Buckingham, "façon de Venise," at his glass-works at Greenwich from 1663.[3] It is very likely that "flûtes" for champagne were imported for the use of the Court, and for a few luxurious persons, but they were too fragile for the reckless handling they must have received; moreover, fashion shortly decreed that the making of artistic glass "façon de Venise" should gradually come to an end. In the various shapes of glasses numbered and named by Greene in his orders to Morelli at Venice, between 1667 and 1672, glasses for champagne are not mentioned, and the single outline given of the "flûte" form is only 6½ inches high, and has neither name nor number to it. Consequently, we must assume that the little champagne then consumed in England was chiefly drunk from any of the Venetian-made glasses for French or Spanish wine, such as Greene's outlines show, or from those made here to oppose such importations. When all these passed away, or out of vogue, the earliest air-stemmed bell glasses[4] must have been used, and specially the larger examples of the elegant baluster-stemmed glasses with funnel-shaped bowls which have

"Skill in Wines," p. 112, edit. 1675), champagne is unfortunately not mentioned, because he only deals with the treatment of wines in the wood.

[1] P. 189, edit. 1684.

[2] *Notes and Queries*, 4th S., vol. xi. p. 80; *note* by W. Phillips.

[3] See p. 225.

[4] See p. 257.

already been spoken of.[1] The other glasses of the time were too solid or too small for champagne, and it is improbable that this wine was to be obtained in every tavern; Burgundy, with its almost prehistoric "record," "neat Port" just come into favour, and the popular punch, were too powerful to be suddenly displaced.

Champagne, whether sparkling, creaming, or still—mousseux, crémant, or non-mousseux—made way slowly in England, the price was almost prohibitory, and up to the middle of the century was only to be found in great houses.[2] About 1730 a special shape of glass appears to have been devised for it, with a capacious and graceful, wavy or double ogee bowl, plain or ribbed, and a corrugated or a ribbed, and domed foot, an almost constant feature, the stem being of short baluster form, with a double beaded knop. The date of two examples of these kinds in the author's cabinet (Plate 49, and Fig. 254) has been

FIG. 254. (One third.)

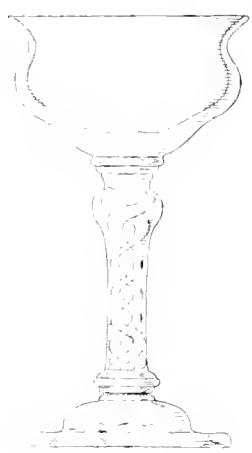


FIG. 255. (One third.)

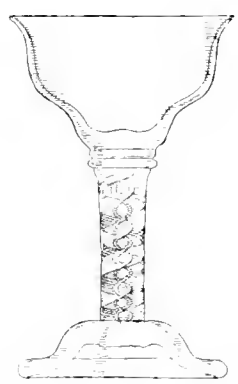


FIG. 256. (One third.)

arrived at from their general character, supported by a pair of glass taper candlesticks, with the like shape of stem and corrugated foot, and with no suggestion of nozzles, in the same collection. A taper candlestick with a baluster stem, and a corrugated and domed foot, is also in the possession of Mrs. J. Paull, and one with a brilliant air-twisted stem is in the author's collection; Mr. S. A. Gurney has a capital pair of candlesticks about 8 inches high, with "wrythen" sockets, twisted stems, moulded and beaded bases, and domed and corrugated feet. All these glass objects must have come from the same manufactory, and the known dates, from Hall Marks, of English silver taper candlesticks without nozzles,

[1] See p. 263.

[2] A Renishaw Wine Bill—an item of Sir G. R. Sitwell's remarkable assemblage of documents illustrating the Renishaw household expenditure from 1660 to the early years of the present century—shows that as late as 1810 "pink" and "creaming" champagne was bought at £7 : 17 : 6 a dozen. This price is partly attributable to the *blocus continental* decreed against England by Napoleon in 1806.

49.—ENGLISH GLASS.

whose shape the glass ones so much resemble, leave no doubt as to their period.[1] Two rather later champagne glasses in the cabinet of Lord Torphichen have respectively an air- and an opaque-twisted stem, and domed and folded feet (Figs. 255, 256). Details of make confirm the impression that the early short champagne glasses were, like the taper candlesticks, specialities of manufacture, and not

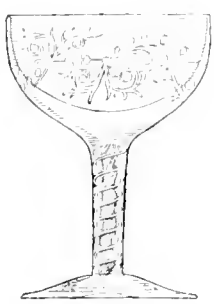


FIG. 257. (One third.)

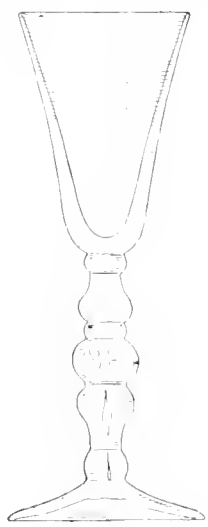


FIG. 258. (One third.)

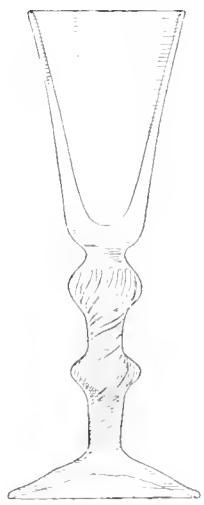


FIG. 259. (One third.)

emanating from a glass-house *quelconque*. Later examples in the collections of Miss Dryden, and of the author (Fig. 257), from the Low Countries, have semi-spherical bowls, opaque-twisted stems, and wide feet. From the circumstance of champagne having been but little drunk in England before the middle of the

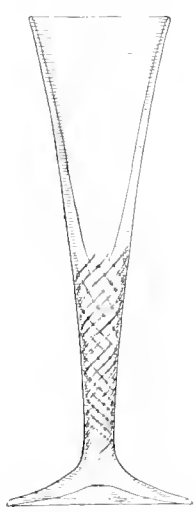


FIG. 260. (One third.)

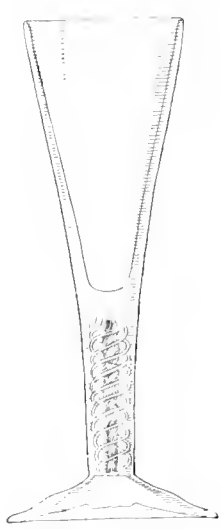


FIG. 261. (One third.)

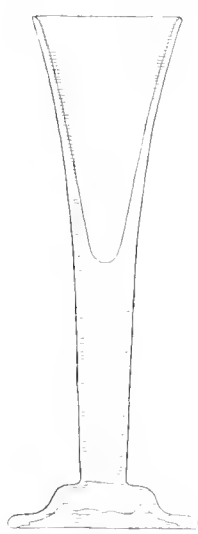


FIG. 262. (One third.)

eighteenth century, the earlier short glasses must necessarily be scarce. The later ones just spoken of overlap those now to be mentioned.

[1] In Mr. Singer's collection, gathered entirely in the district of Bristol, are two examples with double ogee bowls, the one with a baluster stem and a beaded knop, and the other with a bowl moulded in deep reticulations. Both have domed feet and, like those already mentioned, are probably of Bristol make. Removable nozzles were not introduced into silver candlesticks until about 1740.

Soon after the short champagne glasses were introduced, the tall ones began to be made with baluster stems and beaded knops (Fig. 258), and following them, in chronological succession with the wine and punch glasses, came those with shouldered and knopped, and straight, air-twisted, and opaque-twisted stems, as well as drawn, with plain stems and domed and folded feet (Figs. 259-262). Their dates can be readily assigned by the collector, for they run parallel with the wine and punch glasses throughout the greater part of the century, and present the same characteristics of detail. A difficulty however arises and must always remain. It is almost impossible sometimes to say for certain whether a tall glass with no engraving upon it is for champagne or for ale. Perhaps in

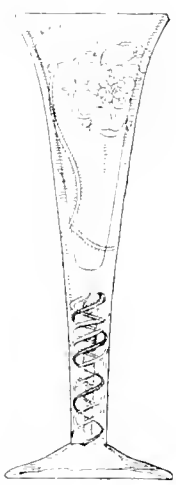
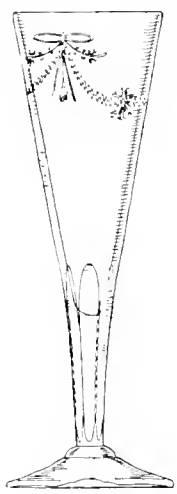


FIG. 263. (One third.)



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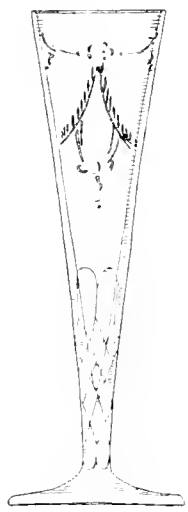


FIG. 265. (One third.)

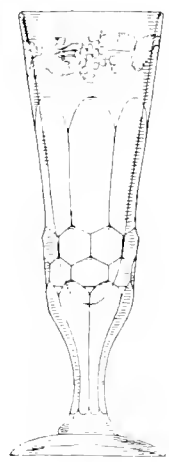


FIG. 266. (One third.)

such cases the better glasses may be appropriated to the wine, together with those engraved with the conventional rose and natural buds. A good example is in the cabinet of Mr. B. F. Hartshorne, with a ruby and opaque white twisted stem—a Dutch glass of the drawn form with inserted stem, and engraved in England (Fig 263). Tall champagne glasses with faceted stems appear in their order of time. Many of those that have fallen under the author's notice are heavy and thick, and not satisfactory in appearance; they lack the picturesqueness of the older examples. Like the silver, the china, and the cut wine and punch glasses of the latter part of the century, those for champagne are similarly decorated with festoons (Fig. 264);[1] others have the same kind of ornament in gold, and spangled with stars, apparently of Dutch as well as of English make (Fig. 265). Coming later, the facets run up in long flutes nearly to the top of the glass, which is often bordered by poorly engraved vine leaves and grapes; and the fatal narrow and flat foot shows that we have passed out of the century (Fig. 266). The

[1] One of a set of six obtained by the author in Florence in 1884; they are possibly English.

introduction of the short open glasses about the year 1832 is a recurrence to the form of the earliest champagne glasses specially made for the purpose in England.[1]

Glasses, Sweetmeat (X.)

Allied in shape to the short champagne glasses are some of those for sweetmeats—the suckets[2] of earlier times. These are small standing dishes

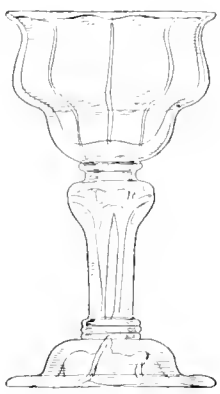


Fig. 267. (One third.)

Fig. 268. (One third.)

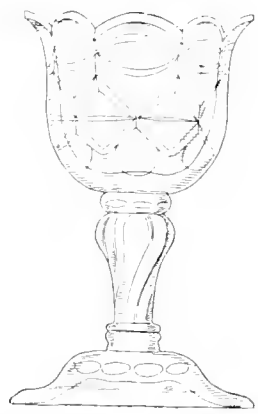


Fig. 269. (One third.)

rather than glasses, and are clearly distinguished from them by their solidity and sharply lipped, or thick undulating edges. Like some of the champagne glasses they are usually ribbed, and with shouldered and moulded stems, and ribbed and domed feet. An example with these features is in the possession of Mr. Syer Cuming (Fig. 267). In later versions the lip is purfled or crinkled, the stems air-twisted, and the foot, as usual, domed (Fig. 268). The bowls of the cut sweetmeat glasses have the edges engrailed, vandycked, or faceted (Fig. 269). In modern days they are used as sugar-basins. The changing character of the entire group is consonant with the well-ascertained flux of the drinking-glasses.

[1] In Disraeli's *Letters to his Sister*, published after Lord Beaconsfield's death, he gives, 1st March 1832, an account of a dinner party at Bulwer's, and says: "We drank champagne out of a saucer of ground glass mounted upon a pedestal of cut glass," evidently regarding them as novelties. Champagne glasses with hollow stems are poor compromises between the old and the modern shape, and have no practical merit.

[2] See Appendix, Original Documents, Inventory, No. IV. We have seen that others in saucer form were made in Bristol in 1725, as well as fruit baskets (see p. 282, footnote), like the *corbeilles ajourées* of Liège (see Introductory Notices, p. 59); such baskets are shown in the headpiece to *The Happy Inconstant*, 1739 — *Calliope*, vol. i., No. 101.

CHAPTER XIX.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED — BREWING — DIFFERENCE BETWEEN ALE AND BEER — GROUP XI. ALE GLASSES, MEAD GLASSES, SYLLABUB GLASSES.

BREWING.—The first brewing of ale in Britain must have been a notable advance in civilisation. Such science, as it then represented, was probably brought here by the Romans. Apart from Roman drinking-cups, embossed, fluted, "wrythen," and plain, of ordinary tumbler form—such as have been revealed by excavations at Pompeii, and which we now naturally associate with beer-drinking, and which must have been used, and possibly to a certain extent made here during the Occupation—the earliest existing ale glasses in Britain are those clearly derived from observation or remembrance of Roman models in Anglo-Saxon times. Mention is made by Beowulf of "hroden ealo-wœge," the twisted ale cups—a term which has been attributed to a variety of the Anglo-Saxon glasses which we have grouped under Class 2 of these vessels.[1] All these were, of course, for the *beor* of the Anglo-Saxons, called *cala* by the Danes, and for the prehistoric and heady metheglin, humming in the brain of the reveller, and speaking, as the old saying went, too much of the house it came from. Of this potent beverage the common name and kind was hydromel or mead; and both sorts were composed of honey, herbs, and water, and were still largely made, as we should expect, in Wales and the Marches as late as at the end of the seventeenth century.[2] Pepys drank Charles II.'s own iced metheglin—"most brave drink"—at the "Backe-stayres," Whitehall, 25th July 1666. The Anglo-Saxon glasses likewise served for sweet-wort, also called "ydromellum" and "mulsum,"

[1] See pp. 115, 121.

[2] Markham, *ut sup.* p. 181; Howell, *Discourse to Lord Clifford*, ut sup., 7th October 1634.

At Cogenhoe, Northamptonshire, mead was regularly made in the house of Mr. Hugh Higgins up to the time of his death in 1849, in the ninety-fifth year of his prolonged pilgrimage. The author, then a small boy, well remembers this aged man—with whom so many customs of the old world tarried—relating to him that in 1761 he went

no doubt because honey was often added to it; for "mellicratum" (geswet win), "inomellum" (must mid hunig gemenged), and for the rough drinks made from almost prehistoric wild apples and pears, subsequently called cider and perry. In the later period the palm-cups and the bowls were used for braggot, a spiced mixture of many qualities composed of ale and mead, and which few persons would care to drink at the present day. Such also were the cups for the varieties of wine, pure and mingled, in use in later Anglo-Saxon times. Many of these broken liquors were struck with herbs and condiments recalling the fashion of the waxed, resined, and spiced classical cups of beechwood introduced into Northern regions by the Romans.

As to the difference which arose between ale and beer. It appears that the wild hops were put into liquors in Saxon times, but rather aimlessly—as was usual in the extraordinary unscientific and haphazard receipts both for eating and drinking of the Middle Ages—and as pleasant herbs, together with others, rather than in view of any known special improvement of the drink by their use, or for assisting its keeping quality. Such service of hops was never forbidden by law, but the use of the plant in brewing appears in course of time to have differentiated the drink which was helped with it, from ale which had it not. Gilbert Keymer,[1] a sensible writer on Dietry in the beginning of the fifteenth century, pronounces beer brewed from barley, well hopped (bene lupulata), of middling strength, thin and clear, well fined, well boiled, neither too old nor too new, to be a sound and wholesome beverage—a dictum which nobody will deny. In the *Promptorium Parvulorum* of 1440 ale is described as "cervisia," "et nota bene quod est potus Anglorum"; it was made of malt and water, while beer is merely spoken of as "a drinke," and is defined to consist of malt, water, and hops, showing that hops had become a recognised feature of the "drinke" called beer some time before 1440.

up to London in the wain, made his way through the crowd into Westminster Abbey, and saw George III. crowned on 22nd September—a long link between the present and the past. Mead-making lingered in England in a few country places, but seems to have gradually passed away with the old race of servants who took a pride in the oil-polished mahogany tables, and practised and cherished the "conceited secrets" of bygone days; the increase of the beer-brewing industry gave it the deathblow. In America mead must have been made from prehistoric times. The late Dr. Postlethwaite, of West Point Military Academy, informed the author that it was a favourite drink in Kentucky forty years ago. Old MS. receipt books show that there were many varieties—Sack Mead, Walnut Mead, Cowslip Mead, Spiced Mead, Small Mead, etc., the kinds being differentiated by the character of the leading additional ingredients. The inscribed bronze mortars of the late sixteenth and the seventeenth century were used for braying and bruising the brewers' herbs and spices, as well as by the leeches, apothecaries, and chirurgeons for drugs.

[1] MS. Sloane, No. 4, p. 166.

The introduction into the brewing of ale of any hops or herbs came thus to be looked upon as an adulteration, and the use of hops in ale was fined. But hops were suffered to be employed by the English and foreign beer-brewers practising a separate craft in England, and the law was enforced to keep the productions of the distinct trades respectively pure. The immigration of numbers of Flemish brewers in the first quarter of the sixteenth century had introduced the proper cultivation of hops—we had heretofore been content with the wild variety—and of beer systematically brewed with its aid; and although the liquor was much opposed, with the usual insular prejudice, it gradually made its way against the sweet thick ale which no one would dream of drinking now.[1]

Group XI. Glasses, Ale, Mead, Syllabub.

The character of the drinking-vessels in use for wine, beer, and ale during the Middle Ages, and down to the end of the sixteenth century, has been touched upon,[2] and we may support the information as to the later time by the headpieces of broadsides and ballads of the sixteenth and seventeenth centuries; these in their turn are corroborated by the appearance of the drinking-cups in earthenware, metal, and glass, shown in early Low Country pictures, and by the allusions to glasses for wine, beer, and distilled waters in cotemporary extracts from inventories. In the Suit of Sir R. Mansel to the Lords in 1639 (?)[3] the prices of ordinary beer glasses then, and formerly, are given, and it is stated that crystal beer glasses, hitherto obtained from Venice, were first made here by Mansel at half the price. We have formed an idea[4] what these beer glasses must have been like from the general style of the period, supported by the outlines of those furnished to Greene from Venice in the latter part of the century. They were larger versions of the wine-glasses, and in this way the sizes of beer and ale glasses were regulated in England almost up to the middle of the eighteenth century. For example, while "the noble men" were drinking champagne in London from the beaded baluster-stemmed glasses, country gentlemen of the stamp of "Sir John Linger," "Colonel Alwit," and the boisterous assistants at the Houghton "Congresses" were tippling March

[1] Much information concerning the rise and progress of brewing with hops in England has been brought together by Mr. J. Bickerdyke in *The Curiosities of Ale and Beer*, chap. iv. p. 65, n.d., but published 1889. The well-known distich in its several versions as to the coming of hops, pickerel, etc., into England will not bear close examination; indeed, we have seen that hops had been used on a settled plan in beer-brewing in England a century before the Reformation.

[2] See pp. 136, 137, 144, 150, 165.

[3] Appendix, Original Documents, No. XXIII.

[4] See p. 219.

beer, "October," or strong ale, such as that from Lord Orford's "Hogan,"[1] out of the larger versions of some of the punch and wine glasses; but principally the capacious and plain tavern and household glasses of the drawn, straight-sided, or ogee shape were used (Fig. 270). Many of Sir Robert Walpole's glasses of the drawn form, about 10 inches high, were still remaining at Houghton a few years ago.[2]

As with the champagne glasses, those for ale were also made in the tall modified "flûte" shape. It is apparent that they first began to be fashioned in England about 1735, being probably suggested by the changed shape of the

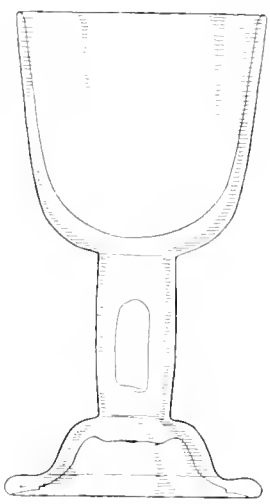


FIG. 270. (One third.)

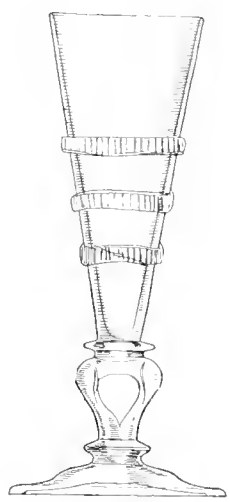


FIG. 271. (One third.)

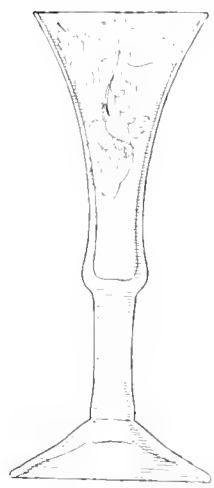


FIG. 272. (One third.)

champagne glasses, and the improvement in the quality of the ale which gave it a more honourable position at well-equipped tables. The earliest tall ale glasses were not engraved, and it must be understood that it is from their resemblance to those that are decorated with hops and barley, and their somewhat heavy character, that we have assigned certain glasses to ale rather than to champagne. Obviously the shape would serve as well for the one as for the other beverage, and no doubt the plain glasses were often used indifferently.

[1] "'Tis 12 o'clock & I write in a great hurry for we have been at Houghton to day, & I daresay it obliged Mr. Baldry highly, for they wouldn't have seen any thing without us y^t^ signify, & they saw every thing & tasted of ye Hogan, Tilly was so merry & comical there, she made every body laugh, she did run and fly about, and ye Housekeeper got her & laid her onto ye Velvet Bed, & kissed her; & was mightily pleased with her."—Barbara Kerrich, Dersingham Hall, to Elizabeth Postlethwayt, Denton Rectory, Dec. 17, 1745, *Original Correspondence*, 1633-1828, *ut sup.* vol. vii. p. 143, in the possession of Albert Hartshorne. This was four years before Mrs. Norsa, who was "everything but Lady," was "bearing great sway at Hougton," *ibid.*, p. 160.

[2] The late genial and accomplished antiquary, Sir C. H. J. Anderson, told the author in December 1890 that, in the time of his grandfather, who succeeded in 1765, ale and small beer were drunk at the table both by men and women; the latter generally drank *small*, but when they wanted *ale* they asked for beer and held up a thumb—a silent and unfailing signal. There used to be an expression, "Here's my thumb, I'll ne'er beguile you," which, in this regard at least, has now lost its significance.

There are no English Conversation Pieces of the time under consideration that might give a clue to the early use of the tall ale glasses here, and Hogarth's pictures do not help us, nor are the copper-plate engravings of the time sufficiently distinct or reliable; moreover, the large proportion of them were the work of foreign artists of Paris or of Leyden, so do not serve the purpose in question.

An ale glass of about 1735, of the new shape, apparently an English imitation of a Low Country glass "façon de Venise" for wine, is banded with three quillings, and has a heavy bulbed stem and a wide folded foot; all these are early features (Fig. 271). This example is now in private hands; two others, almost

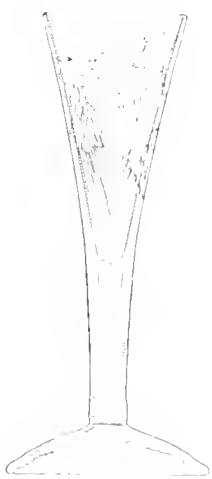


FIG. 273. (One third.)

FIG. 274. (One third.)

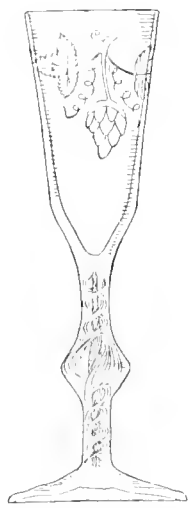


FIG. 275. (One third.)

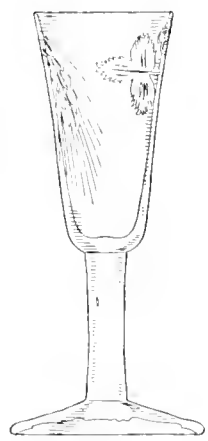
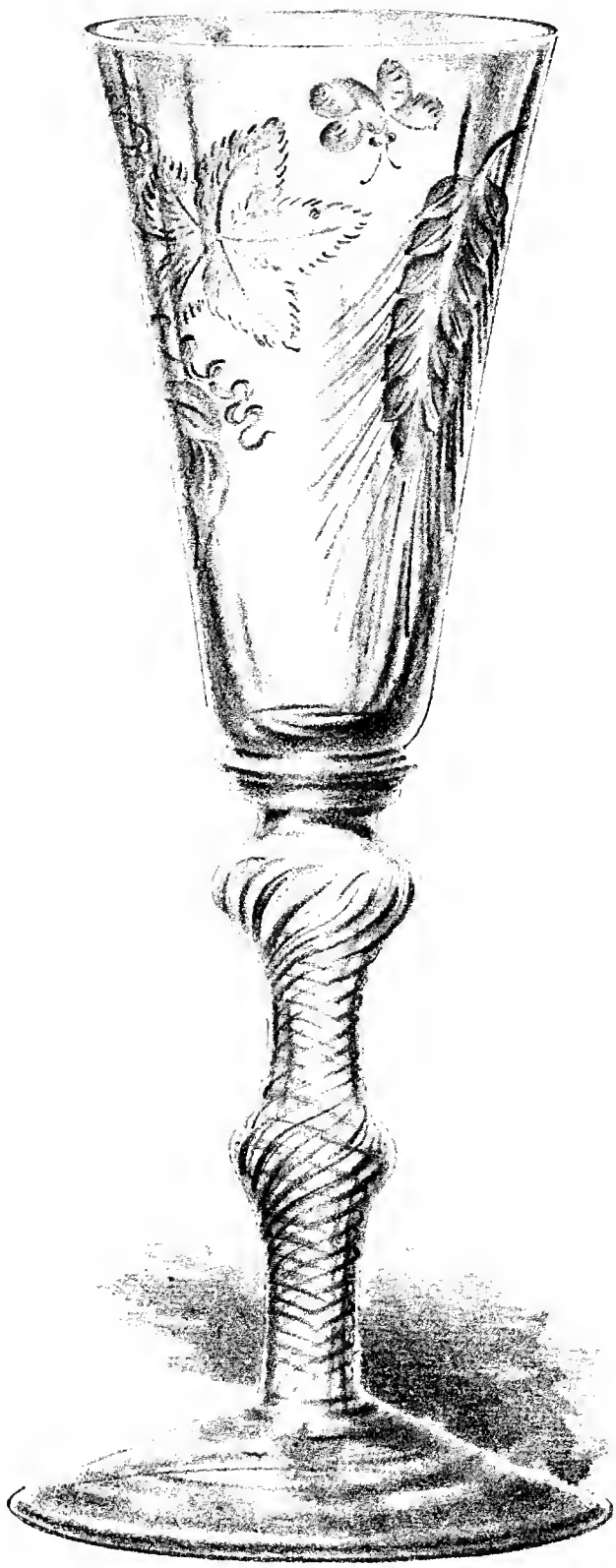


FIG. 276. (One third.)

identical with it, were sold in Edinburgh in November 1892, but no more have fallen under the author's observation. When we come to the tall glasses engraved with hops and barley there is no question as to use; and now, again, the ale glasses follow the chronological order that has been set down for those for wine, punch, and champagne, the character and shape of the stems similarly indicating generally their dates. For examples—(1) a waisted ale glass (Fig. 272), with a lofty folded foot and plain stem, must belong to an early decade in the eighteenth century; (2) one with a shouldered and knopped air-twisted stem (Plate 50); (3) a plain drawn glass, with a high folded foot (Fig. 273); (4) one of like shape, with an opaque white twisted stem (Fig. 274); (5) another with a knopped stem (Fig. 275); and (6) a plain-stemmed, straight-sided ale glass, with a wide folded foot (Fig. 276), may have their places readily assigned to them in the series to which they belong. All these, engraved with hops and barley, almost covering the bowls, have been taken as suitable illustrative examples from the author's collection. Unengraved tall champagne or ale glasses of the



50.—ENGLISH GLASS.

latter part of the century, with opaque-twisted stems, are not rare, but are likely soon to become so. They diminish in height as the century wanes, and there is reason for thinking that some of those in which the junction of the bowl with the stem takes the ogee line were primarily for mumm, a North German drink of which the merits were not proportionate with the trouble taken in its manufacture.[1] Pope protests, however, in *The Dunciad* that—

The clamorous crowd is hush'd with mugs of mum,

and perhaps mug-houses are synonymous with mum-houses; but no true Jacobite would touch it. Examples from Mr. B. F. Hartshorne's and the

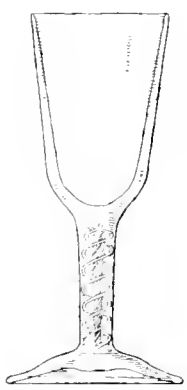


FIG. 277. (One third.)

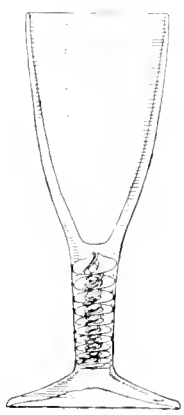


FIG. 278. (One third.)

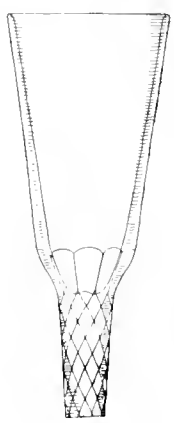


FIG. 279. (One third.)

FIG. 280. (One third.)

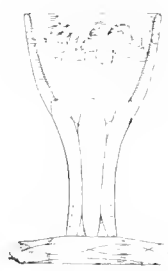


FIG. 281. (One third.)

author's collection illustrate this form (Figs. 277, 278). Cut glasses of the same shape, with faceted stems, but not engraved, are sometimes met with. Mr. Syer Cuming has the remains of one found at London Wall in 1885 (Fig. 279). Some of the short ale glasses of the end of the century, of the common tavern and household form, have small crossed ears of barley and a bunch of hops roughly engraved upon them (Fig. 280). Others have festoons or borders in polished indents strung on a thin line after the usual pseudo-classical fashion of the time. Finally may be mentioned the small and carefully cut glasses of the very end of the century, in the best possible metal, with fluted stems, faceted feet, and the bowls engraved with a border of hop flowers and leaves (Fig. 281).

[1] It is said to have been invented by Christian Mumme, a brewer of Brunswick, in 1489, and was introduced into England shortly after the Restoration. Pepys drank it at the "Fleece," a mumm house in Leadenhall, 3rd May 1664. The foundation of mumm was wheat malt, with a seventh part of oat malt and ground beans respectively. It was flavoured with the inner bark and tips of the fir, and a multitude of herbs and seeds, including even horse-radish and water-cress. No glasses engraved with wheat have been noticed here. Tavernier the traveller has recorded the craving of the Dutch in Batavia for "mom." Houghton (Original Documents, No. XXXIII.) mentions that the native manufacture of mumm glasses might be encouraged; they appear at that time to have been largely imported, but evidence is wanting as to what form they then took.

These were for the strong old ale—the "Upsey-English" of earlier times—drawn from the cask and brought to the table like "port" and "white" in decanters specially inscribed FINE ALE, and drunk from the small glasses which prudence and its powerful qualities alike suggested. An inscribed "Fine Ale" decanter, engraved with hops and barley, is in the author's collection. The illustrations are again taken from the same source as those of the taller glasses. The butterfly and the hovering bird are never shown in attendance on the hops and the barley, as they are respectively on the roses and the grapes, and only in one instance a small winged insect has been noticed, irresolute between the hops and the corn. These conditions of decoration show the deliberate system of the English glass-engravers of the eighteenth century.

GLASSES, MEAD (XI.)

Mention having been made of mead, it should be stated that this beverage had its special glasses in the seventeenth and eighteenth centuries, but English

FIG. 282. (One third.)

FIG. 283. (One third.)

FIG. 284. (One third.)

examples are so scarce that there is very little to say about them. They were of bowl, or low tumbler form, and those of Old German origin are decorated with large flat blobs, *frêsé*, like the Liège glasses, or with deeply moulded trellis-work. The typical shape of glasses from which *de meede* was drunk in Holland was that of a bowl with incurved edge upon a broad foot, and vessels allied to this shape may be seen in seventeenth-century Dutch and Flemish pictures of low life. Here we have no such records, but a few English examples of mead glasses have been noticed. A trellised bowl, and a plain one in milk glass upon a low transparent foot are in the cabinet of Mr. Cuming (Figs. 282, 283); some mead cups are in the collection of the Rev. S. M. Mayhew, and in the author's hands is an example slightly *évasé* in amber glass splashed with white, with a folded edge, and believed to have been made in an early eighteenth-century glass-house at Hopton Wafers, Shropshire.[1] Another with a waved

[1] A pale amber glass jug, 8½ inches high, was obtained from a cottage under the Wrekin by the late Rev. C. H. Hartshorne about sixty years ago. It is splashed with red, white, and pale blue. A

lip in thick yellow glass, full of minute bubbles, and spirally striped with close blue lines, is in the same collection (Fig. 284). Outlines of their forms may bring about the recognition of other examples of these once numerous vessels. Excise duty was collected on mead in 1797; it was not repealed until about forty years after.

Glasses, Syllabub (XI.)

Syllabub, a mawkish drink, was well known and appreciated in the early years of the seventeenth century, and in later times had its special glasses of open tumbler form; we have seen that "Whipt-sillibub glasses," for the more complicated version of it, were sent to Cork from Bristol in 1725.[1] But inasmuch as the final feature of the preparation of simple syllabub—its "stroking" at the cow's side—necessitated a large bowl, and a punch ladle for the service of the thinner beverage, the wine and punch glasses were usually employed for it. And so it was in hay-fields in Northamptonshire within the author's recollection.[2] The earlier practice was to drink syllabub like posset through the spout of an earthenware pot with two handles. The Immortal

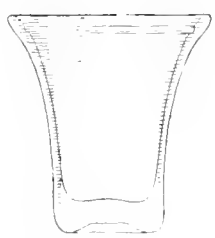


Fig. 285. (One third.)

Fig. 286. (One third.)

bottle, 6 inches high, rather darker, and splashed white, was given to him as a mark of regard by a poor dying woman in Little Wenlock, who produced it from under her pillow. These, now in the author's possession, no doubt also came from the Hopton Wafers furnace under the Titter-stone; the "Glass House Farm" records its site. Mr. Chandos-Pole-Gell has a pale amber bottle, 10½ inches high, splashed white. A pale green white-splashed jug was lately obtained near this village, and is known to have been made there. One source of these rather peculiar productions is therefore identified. Nailsea, near Bristol, was another, with darker coloured glass, sometimes blue.

[1] See p. 282. Writing from "Kentis" to Thomas Iones, 1st June 1625, Howell says: "I pray leave the smutty Ayr of London and com hither to breath sweeter wher you may pluck a Rose and drink a Cilibub."—*Familiar Letters*, ut sup., Sec. 4, p. 105.

[2] "There is a great Dearth of Literary News. The only Articles of that sort, that I know of, are: That Dr. Hayles hath actually published; what has been some time talked of; a Tube of Tin, with a Box, of the same, at the lower end of it (like a box for a great Seal:) that is full of very small Holes. This Engine, with the help of a pair of Bellows blows up Cream into Syllabub, with great expedition. This Complex Machine has already procured the D^r^ the blessing of the Housekeeper of this Palace, and of all such as she is, in the present Generation (who know the Time & Labour required to *whip* this sort of Geer:) and will cause his memory to be had in reverence, by all Housekeepers, in *the Generations that are yet for to come*. . . . My old Master, the King, is not well: —very far from it.—He vexes himself—& no wonder—at the Deplorable Condition of his Native Country, that is undone in a Cause it has no relation to—he has lost one Eye, & the other is not a good one—and his flesh abates. I am afraid for him. But I am apt to fear the worst for those I love."—Edmund Pyle, D.D., Chelsea, Canon of Winchester, and Chaplain to George II. and George III., to Samuel Kerrich, D.D., Dersingham Hall, Vicar of Dersingham, Rector of Wolferton and of West Newton, 21st Nov. 1758—*Original Correspondence*, 1633-1828, *ut sup.* vol. xiv. p. 143, in the possession of Albert Hartshorne.

Dreamer had such a pot in Bedford Jail. In Mr. Cuming's collection is an open-mouthed glass tumbler, a family relic, $3\frac{1}{2}$ inches high, said to be of the first part of the last century, and called from time immemorial "a syllabub or whip glass" (Fig. 285). Mr. H. Willett has an opaque milk-white glass of similar size and shape, gilt-edged, and decorated on one side in gaudy colours with the figures of a gentleman and a lady of about 1790. It is inscribed in gilt letters, A TOKEN OF LOVE FROM YARMOUTH; on the other side is a nosegay of flowers; and on the bottom, **Absolon Yarm,** the name of a china and glass-seller at Yarmouth; it was a martage or fairing (Fig. 286).

CHAPTER XX.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED — ORIGIN AND ANTIQUITY OF CIDER — KING JOHN'S DEATH — EXCISE DUTIES — GROUP XII. CIDER GLASSES, PERRY GLASSES.

ALLUSION has been made to the high antiquity of cider, a word which philologists have derived from the Hebrew *shâkar*, to inebriate. Cider appears to be mentioned in Vocabularies dating from the tenth to the fifteenth century as Sicera, Cicera, Scicera, "scisere"; and Sisera, glossed as "sycher," and is always distinguished from cervisia, ale.[1]

In the Gothic Gospels, translated by Ulphilas about 360, the words of the angel to Zacharias respecting John the Baptist are rendered, "yah wein yah leiþu ni drigkid;" and in the Anglo-Saxon version of about 995 the words are "and he ne drincþ wîn ne bêor," the latter being then the stronger of the two. Wycliffe, in his translation of about 1380, has, "and he schal not drynke wyn and sydir," varieties of the word in MSS. being "cyser" and "cyther." In his later version Wycliffe again says, "and he schal not drinke wyn and sidir." Thus he gave to the name of the generally mild beverage of the present day the character implied by the generic Greek word σίκερα, Latinised into "sicera," the "sycher" of the thirteenth century, and meaning any fermented drink made from fruit other than grapes, intoxicating or strong, such as cider undoubtedly sometimes is. The modern and proper rendering of σίκερα was first given by Tyndale in his first edition of the New Testament, printed in 1525-26, "and shall nether drynke wyne ner stronge drynke." Coverdale, in his Bible printed at Zurich, it is believed in 1535, uses the words "wyne and stronge drinke," and so does Archbishop Parker's, or *The Bishops' Bible* in the edition of 1572. But in the New Testament of *The Douai Bible*, first printed at Rheims in 1582, "sicer"

[1] *A Library of National Antiquities*, vol. i., printed by Joseph Mayer, 1857, pp. 27, 93, 98, 178. Vocabularies, edited by Thomas Wright, privately

is reverted to. Finally, strong drink was accepted by the divines of the Authorised Version, printed by Barker in 1611.[1]

Apple gardens are spoken of in Domesday, and Worcester was early famed for its orchards. In Matthew Paris's account of King John's death, 28th October 1216, he evidently uses the word "cicer" in the same sense as Wycliffe did long after; he says: "But his very hurtful gluttony increased the troublesome nature of his illness, who, on that night, having indulged too much in eating peaches and by drinking new 'cicer' strongly intensified and inflamed the fevered heat within him."[2]

Howell, a Welshman from the heart of South Wales, and educated at Hereford, spoke with some knowledge of cider. After dealing with ale, beer, metheglin, braggot, and mead, in what he calls his "dry discourse upon a fluent subject" to Lord Clifford in 1634, he says that "cider and perry are also the natural drinks of part of this isle," meaning the Hereford district, namely, Herefordshire, Gloucestershire, Monmouthshire, and Worcestershire, and the Devon district of Devonshire, Dorsetshire, Somerset, and Cornwall.

Cider was extensively manufactured during the thirteenth century as far north as Yorkshire. It was evidently also made at an early period in Lincolnshire. King John drank it new at Swinestead in October 1216; it could not therefore have come from far, and was consequently what Howell speaks of as a "natural drink" of those parts also; and so it continued, and was largely made

[1] See *The English Hexapla;* and *The Gothic and Anglo-Saxon Gospels*, etc., by the Rev. J. Bosworth, edit. 1874.

[2] "Auxit autem aegritudinis molestiam perniciosa ejus ingluvies qui nocte illa de fructu Persicorum et novi ciceris potatione nimis repletus, febrilem in se calorem acuit fortiter et incendit." A curious paper on the Death of King John, by the Rev. F. Spurrell, in the *Archaeological Journal*, vol. xxxviii. p. 302, shows conclusively that a surfeit of new cider and peaches aggravated the King's illness, and accelerated his death. This occurrence was in no way chargeable to poison, or to supposititious venom of a toad administered in a cup of wine by a monk of Swinstead, as so many historians have asserted. John Fox, indeed, goes so far as to present the event in a series of six dramatic scenes engraved on a copper plate in his *Acts and Monuments*, facing p. 200, edit. 1684. It was nothing but a vulgar monkish legend which Caxton gives as follows in his Chronicle of 1480:—

Tho went the monke in to a gardeyne and fonde a grete tode therein and toke hir up and put hir in a cuppe and prikked the tode thurgh with a broche many tyme till that the venyme come oute in every side in to the cuppe, and tho toke he the cuppe and fylled it with good ale and brought it before the Kyng and knelyng said, Sir, quoth he, Wassaile for never daies of your lyfe ne dronke ye of such a cuppe. Begynne monk, quoth the King, and the monke drank a grete draught and toke the Kyng the cuppe and the Kyng also drank a grete draught and sette downe the cuppe. The Monke anone right went in to the fermorie and ther died anone on whos soule god have mercy, Amen, and v monkes sing for his soule specially and shullen whiles the abbey stant. The King aroos up anone full evell at ese and commaunded to remeue the table and axed for the monke and men told him that he was dede for his wombe was broke in sunder. When the Kyng herd this he commaunded to trusse, but alle it was for nought, for his bely began to swele for the drinke that he dranke that he died withynne ii daies the morwe after Seint lukes day.

Hemingford, Higden, and Knighton vary the story by poisoning a dish of pears. It should be noticed that at the end of October peaches would be ripe on the cold east coast of England, and cider newly made. The King was, therefore, so far correct in his gastronomical instincts, though unfortunate in the manner of their application.

in Norfolk during the eighteenth century, just as it is at Banham, and of very good quality, in the south of the county at the present day.

In Lawson's description of cider and perry making in Yorkshire in his time, that is, before 1597, he adds: "And if you hang a poeke full of cloves, cinamon, ginger and pills of lemmons in the midst of the vessell it will make it as wholesome and pleasant as wine. The like usage doth perry require." So the spicing of drinks had been extended to cider and perry.[1]

Mr. Evelyn speaks of the "vast apple orchard" which Hereford had become through the efforts of the Lord Scudamore, who set his interesting mark upon the secluded Cistercian Church of Dore in the Golden Valley.[2] The accomplished author of *Sylva* also quotes Dr. Beale as saying that he had for some years tried cider in Somerset, Kent, and Essex, and that after an experience of thirty years of that of Herefordshire he found it the best.

Excise duties are said to have had their origin in the tax laid upon beer, cider, and perry in 1643. In 1733 Walpole's obnoxious Excise Bill was abandoned amidst general rejoicings, and cockades were assumed with the legend, LIBERTY PROPERTY AND NO EXCISE,[3] and though the popularity of the motto dates from this time, it does not seem to have found its way on to drinking vessels of china and glass until later. Cider, like many other products, was subjected to excise regulations of sale and duties in 1763, and the clumsy and uncertain methods of its manufacture further tended to discouragement. The injurious interference with this particular home produce was removed before 1838. In Michael Edkins's ledger for Bristol glass, under the date 18th August 1763, is the entry, "To 6 Enamelled p^t. Canns wrote *Liberty and no Excise*."[4]

Group XII. Glasses, Cider, Perry.

With respect to cider glasses, Mansel makes no mention of them, nor does Greene in his letters and "forms" for orders to Venice; and there is no evidence that special shapes were made before the middle of the eighteenth century. Obviously any fairly capacious cup would serve the purpose, whether of earthenware—as commonly used in Somerset at the present day—china, or glass; but

[1] *A New Orchard*, etc., p. 52.

[2] The *Form and Order* of the re-consecrating of the church on Palm Sunday, 1634, the existing stone altar 12 feet long and 4 feet wide, and the contemporary foot pace, in front only, are valuable evidence in a much discussed ecclesiastical question. The *Form and Order* was published by the late Mr. Fuller Russell in 1874 from the original MS. used on the occasion, now in the British Museum, Add. MSS., No. 15, 645.

[3] Stanhope, *History of England*, chap. xvi.

[4] Hugh Owen, *ut sup.* p. 380.

there is a modern sumptuary fiction that cider tastes better out of a vessel of silver than from any other. Such was not the view taken a hundred and thirty years ago.

So little was known about old cider glasses that it was believed both by connoisseurs and dealers in Worcestershire that they had no special shape. After many inquiries the author was fortunate enough to obtain in Hereford two examples of glasses of quite a different form to any that have already been noticed in the present work. The one with a brilliant air-twisted stem, engraved in an admirable manner with an apple-branch border, which has been oil-gilded (Plate 51); and the other with an opaque white twisted stem, engraved on one side with a conventionalised apple tree, and opposite with a large-winged insect —a heavy butterfly or, *absit omen*, the codlin-moth (Fig. 287). An ogee glass

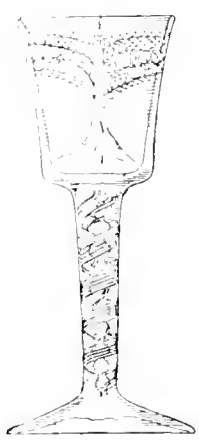


FIG. 287. (One third.)

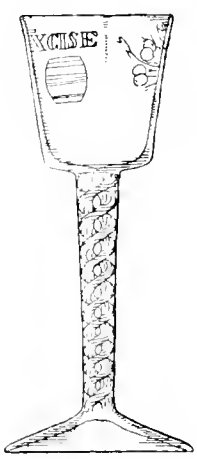


FIG. 288. (One third.)

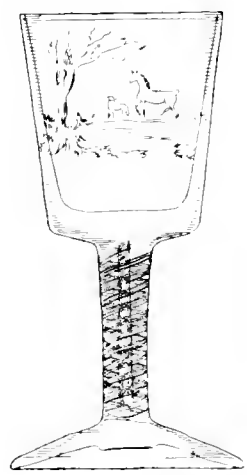


FIG. 289. (One third.)

with a lustrous air-twisted stem, and engraved with the same apple-branch border, drawn by the same hand, is also in the author's cabinet.

In Mr. Singer's collection is a cider glass loosely engraved on one side with an apple tree, and on the other with two barrels, and the words, NO EXCISE (Fig. 288). Mr. P. H. Bate has a somewhat similar example tending to the ogee shape. These words are part of the old popular cry which had been revived by the conduct of Wilkes and the appearance in 1763 of No. 45 of the *North Briton*, and, as to cider, by the excise regulations of the same year touching it. So the date of these vessels is assured, and it is probable that special cider glasses were now for the first time made, in consequence and in support of the clamour that was raised. Further examples bearing the same shape have come under the author's notice or fallen into his hands. They leave no doubt that, for whatever other drink the unengraved ones may have served, the original purpose of all was for the strong cider, treated almost like wine, as was the

51.—ENGLISH GLASS.

"Fine Ale" of later times, and representing in England "le gros cidre paré," "le vin de Pomone" of Normandy. Here, then, we have, four centuries after his time, the powerful *sicera*, the "sidir" of Wycliffe's translation, and which he was minded that St. John should not drink.

It is not likely that the NO EXCISE cider glasses were made in any large quantity, but merely to meet an outburst of public passion which soon calmed; but the shape seems to have been continued for a time. A beautiful glass of a larger size than those mentioned, rather thick, and weighing 14½ ounces, is in private hands. It is gilt edged, and has a landscape, trees, a horse, and four sheep, excellently painted upon it in white enamel, no doubt the production of Bristol or Chepstow[1] (Fig. 289). A pair of plain and large cider glasses, with widely-folded feet, are in the cabinet of the author, and others have been noticed in Norwich, as might be expected. The peculiar shape seems to have passed away some years before the end of the eighteenth century.[2]

GLASSES, PERRY (XII.)

The scientific cultivation of pears, particularly of those of the kind proper for baking, such as the Cistercians of Wardon in Bedfordshire produced, dates at least from the early part of the thirteenth century; and no doubt the improvement of the indigenous wild pear tree is greatly due to the intelligence of monastic gardeners. In the first years of Edward I.'s reign a variety of plants of a better

[1] See p. 280.

[2] A glass of the cider shape, but probably for Burgundy, in the possession of Mr. W. Jackson, is engraved as follows:—

Round the rim,—THE CONFEDERATE HUNT Lady Wms Wynne Lady Parramount. Below,

Mifs Mytton	Lady Patronefs	1754
Mifs Owen		1755
Mifs Shakerly		1756
Mifs Williams		1757
Mifs Nelly Owen		1758

Hark Wenman & Dashwood
Sr Wat & the old Interest
for Ever

On the opposite side is an heraldic rose and natural buds, and a thistle. The glass originally had a white opaque-twisted stem; this is now replaced by a stem and foot turned out of sycamore, the total height being 9½ inches. No information has been obtained concerning this local hunt; it is previous to the institution of the Tarporley Hunt Club, and may have led to it. The latter also had Lady Patronesses and a President, and the members drank claret from "collar glasses," supposed to have held a bottle, as early as in 1762. The admittance glasses were larger still. The Confederate Hunt glass seems to be a memorial of five years of the Club's existence under the auspices of Sir Watkin Williams Wynn, M.P. for Denbigh county, and intended also to record the names of three famous hounds, and a political triumph in the General Election of 1754. The Confederate Hunt was probably for hare-hunting.

No animal is more susceptible of modification than the dog, and it is not generally recognised that the foxhound, as we now know him, is a development dating from about 1750, probably from Lord Arundel's pack of the last quarter of the seventeenth century.

sort were imported from France, and perry was made to almost as great an extent as cider early in the following century. The introduction of further and finer kinds of pears from France and Belgium is coincident with the conclusion of the Great War.

Of special perry glasses there is at present no evidence. If any exist they are more likely to be found in the district of "The Faithful City," whose arms—like those of Wardon Abbey—are three pears, or in that "The Ever Faithful City," than anywhere else.

CHAPTER XXI.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED — ORIGIN AND ANTIQUITY OF DISTILLATION — MEDIÆVAL SUBSTITUTES IN ENGLAND FOR STRONG WATERS — THEIR INTRODUCTION, GROWTH, AND ESTABLISHMENT — GROUP XIII. STRONG WATERS GLASSES — CORDIAL WATERS GLASSES — MASONIC, THISTLE, AND COACHING GLASSES.

DISTILLING.—Long before the German peoples and the Northern nations began to rudely and reprehensibly mingle different liquors, merely striving after something stronger, the Arabians in remote ages of the world had carried on the art of skilfully extracting aromatic essences from plants and flowers in the form of distilled waters for the bath. Many other arts and sciences had their origin in Arabia, and while it is indicated by certain passages in Pliny and Galen that both the Greeks and the Romans were well acquainted with the distillation of aromatic waters, the character of a multitude of small vases of pottery and glass points also to the same conclusion.

Arnoldus de Villa Nova, a physician of the thirteenth century, is, however, the first author who speaks explicitly of an intoxicating spirit, the true *aqua vitæ*, as it was called and believed to be, obtained by the distillation of wine, and this he speaks of as a recent discovery. Raymond Lully of Majorca, a disciple of Arnoldus, in his *Theatrum Chemicum*, of the end of the thirteenth century, describes the slow and tedious process of distillation from wine and its results, which were yet unknown in England at the end of the fifteenth century. Such knowledge was first brought westward by the Moors into Spain about the middle of the twelfth century, and appears to have come very slowly northward. It was probably introduced into England from Ireland.

Distilled or cordial waters had their imperfect substitutes in England in the *claretum* and *pigmentum*, the claré, and the piment, or nectar, of the

Middle Ages, both being mixtures of honey, sugar, spices, and wine, the former containing white, or rather clear red, and the latter deep red wine, and the result in both cases being something akin to what is now known as liqueur, though they lacked much of the spirit and most of the subtlety of their modern representatives. The treatise *De Utensilibus* of Alexander Neckam, of the twelfth century, mentions both claré and nectar as proper to be found in the cellar or in the storehouse.[1] Neither are spoken of either in the Anglo-Saxon *Vocabulary* of Archbishop Alfric, the grammarian, of the tenth century, or in another of the tenth or eleventh century, though "gewyrtod win" (spiced wine), "win gemenged mid myrran" (wine mixed with myrrh), "gehluttrad win" (refined wine), "gehlyttrod win" (pure wine), and "gesweted win" (sweetened wine),[2] all mentioned by Alfric, well represented the choicest productions of that age. All these were drunk in the *aqua vitae* measures of the later palm cups which have been tabulated under Class 4 of the Anglo-Saxon glass vessels.[3]

In a *Nominale*, and a Pictorial Vocabulary, both of the fifteenth century, *clarete* and *pyment* occur. But while "claretum"—*a clarete* of the former becomes "claretum"—*a clerote wyne* of the latter document of the end of the century,[4] nectar remains unchanged as to its definition, and seems to have retained its luscious quality as *piment*, being made with the red wine of Auvergne—the *vinum falernum* of the Middle Ages, which was better suited as a foundation for what was required than the clear red wine which formed the basis of *clarete*. As late as the end of the fifteenth century there appears to have been no ardent spirit in England distilled from wine or other drink, and presumably no acquaintance with the art of extracting aromatic essences from flowers and plants; a knowledge of the one process would have carried that of the other. All these luxuries came slowly westward from the Orient.

There is nothing to show that distillation of spirits was practised in Scotland before the Reformation. For instance, there is no mention of "usky" (*aqua vitae*) in the Statute of 1535, and as late as 1591 it was more than twice as dear as Spanish wine, and twenty-four times the price of ale.[5] The

[1] *A Library of National Antiquities*, Vocabularies, *ut sup.* p. 98.

[2] *Ibid.*, pp. 27, 290.

[3] See pp. 115, 121.

[4] Vocabularies, *ut sup.* pp. 232, 258.

[5] E. C. Batten, *The Charters of the Priory of Beauly*, p. 259, edit. 1877.—"The word *Whisky* signifies water, and is applied by way of eminence to *strong water*, or distilled liquor. The spirit drunk in the North is drawn from Barley. I never tasted it, except once for experiment at the inn in *Inverary*, when I thought it preferable to any *English* malt brandy. It was strong but not pungent, and was free from the empyreumatick

Irish, with their ready intelligence, were in advance both of the Scots and of the English in this particular sign of civilisation, and had earlier cognisance of the three processes of mashing, fermentation, and distillation. Richard MacRagnaill is recorded in the *Annals of Loch Cé*, II. 112, to have died in 1405 from drinking too much *uisce-betha;* and in the *Red Book of Ossory* is an account of the process of the distillation of *aqua vitae*, and of its merits, dating about the end of the fourteenth century.[1] Howell tells us in 1634 that the Irish not only gave a pictorial character to their usquebaugh by tinting it of all colours, but made it more perfectly than anywhere else; he adds that, "whereas we drink it here in aqua vitae measures, it goes down there by beer-glassfuls."[2]

But distillation of spirits must have been practised in England quite early in the sixteenth century. *Aqua vitae*, and *rosa solis*, were well known in Elizabeth's time. Agnes, Dame Hungerford, in her Inventory of 1523, had "a presse full of glasses with waters in them;" the Princess Mary had several glasses of rose-water, and casting glasses, brought to her, 1536-44;[3] in 1556 Mrs. More of Loseley had twenty-five glasses for "waters" in her closet, and two others;[4] stilling glasses were also bought for Lord William Howard in 1621;[5] and Sir William Fairfax had in 1624 "in the Still House" four stills, and a quantity of glasses—that is, flasks, with distilled waters in them.[6] In the Inventory of Charles I.'s gold plate in the Upper Jewel House of the Tower, 1649, occurs, "An aggatt strong water cupp, with a golden cover garnished with rubies, opalls, and pearles."[7] It is not likely to have been used by the abstemious "White King," and probably belonged to James I.

Henry, Earl of Cumberland was, according to the Pembroke Memoirs, "much addicted to alchemy and chemistry, and a great distiller of waters;" Sir Kenelm Digby also occupied himself greatly in the practice of the distillation of spirits, waters, perfumes, and cordial waters.[8]

Markham, writing in 1675, gives some interesting instructions for a world of waters extracted in the Still Room from herbs, flowers, whites of eggs, and

taste or smell. What was the process I had no opportunity of inquiring, nor do I wish to improve the art of making poison pleasant."—*A Journey to the Western Islands of Scotland*, by Samuel Johnson, p. 123, edit. 1775.

[1] *Historical MSS. Commission*, Tenth Report, Appendix, Part V., p. 255. This is followed by "Modus faciendi nectar." Regulations concerning the making of aqua vitae at Kilkenny, 1542, are printed in the Appendix of Report II., 1871.

[2] *Discourse to Lord Clifford*, ut sup., 7th Oct. 1634.

[3] See Appendix, Inventory, No. II.

[4] *Ibid.*, No. IV.

[5] *Ibid.*, No. VI.

[6] *Ibid.*, No. VIII.

[7] *Archaeologia*, vol. xv. p. 280.

[8] See p. 221, footnote, *Digby*.

other unexpected and surprising sources; and many receipts for *aqua vitae*, *aqua composita*, imperial and other waters cordial and ardent, of which the value is stated to be great and the virtues infinite.[1] He calls them "the pretty secrets of curious Housewifes." The merits of many of these queer cordials, which were survivals of the ancient English mixtures and decoctions, lingered long in the simple minds of country "housewives" who, with a tinge of superstitious reverence, piously enshrined them in their manuscript receipt books, together with many excellent or odd antiquated methods for making whipt-syllabub, white-pot, leach, surfeit-water, remedies against the Plague, "better than Bezoar," drinks for those that are forspoken, "oyntment against the vanityes of the heade," and so forth.[2] Excise regulations as to spirits gradually put a stop to the private stills which so much interested the ladies of the eighteenth century, and the name alone remains for the room now put to quite a different purpose. But the large number of eighteenth-century cordial-water glasses existing indicates how much the efforts of the busy housewives in their still-rooms were formerly appreciated.

Group XIII. Glasses, Strong Waters, Cordial Waters, Masonic, Thistle, Coaching.

We have seen that Greene had small tumblers, speckled-enamelled, fluted, and plain, made for him in Venice, and that one of them is marked as for "brandj," and Howell more than thirty years before speaks of the "aqua vitae measures," thus indicating special glasses, of which, however, Mansel says nothing in his Suit to the Lords of 1639 (?), nor do any original examples appear to have survived. But we may assume that the men of Charles II.'s time did not shrink from drinking strong waters out of Greene's pretty speckled and plain glasses marked in the "forms" for Spanish wine, as well as from his very moderate brandy tumblers.

The taste for strong waters in England was increased by the Dutch habits in this regard, introduced at the Restoration; and in the last years of the seventeenth-century English glasses, specially for "giniva,"—"oude klare jenever," and such pernicious beverages, make their appearance, being merely smaller versions of the heavily-moulded, baluster-stemmed wine-glasses of the time.[3] Thomas

[1] Markham, *ut sup.* p. 101, "Of Distillations," etc. In the Roll of New Year's Gifts for 1556, Armygil Wade, Clerk of the Council, presents "a glasse of aqua composita." Dr. Stevens's *Imperial* or *Sovereign Water* was famous in its day for its almost miraculous virtues. — See *Epulario or the Italian Banquet*, p. 29, 4to, London, 1598.

[2] *The Best Book in the Town*, etc., *ut sup.*, MS. Receipt Book of Mrs. Elizabeth Postlethwayt, born Rogerson, 1678, died 1730.

[3] See pp. 236, 262.

Baskerville, the traveller, mentions in his Journal for 1681 that he sometimes found in the country inns "incomparable strong waters." A glance at a number of drawings of cordial-water glasses running through the eighteenth century shows at once that they do not readily submit as a whole to close classification. But generally, with respect to them, the collector cannot fail to notice how many are

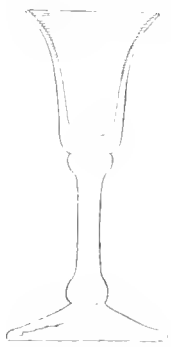


FIG. 290. (One third.)

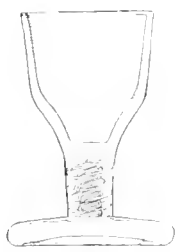


FIG. 291. (One third.)

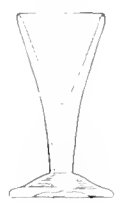


FIG. 292. (One third.)

allied in character to those for tavern and household use (Fig. 290), and that other groups of wine and punch glasses furnish dim contingents in a smaller form to the long cordial-water series. Besides these, and with a distinct style of their own, are the rare, tall, twisted, or plain-stemmed glasses, the short, heavy glasses, such as are seen in Hogarth's pictures, the stumpy, twisted-stemmed glasses (Fig. 291), those with fluted bowls, the ponderous "firing" glasses of the Freemasons,

FIG. 293. (One third.)

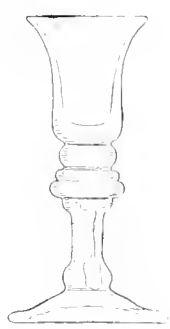


FIG. 294. (One third.)

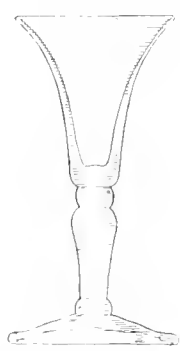


FIG. 295. (One third.)

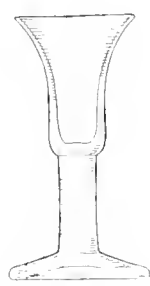


FIG. 296. (One third.)

the very pretty little drawn glasses (Fig. 292), and the minute straight-sided ones which just take us out of the century.

More particularly with regard to them, the heavily-moulded, baluster-stemmed glasses for cordial waters are well represented by two examples (Figs. 293, 294), respectively in the collections of Mrs. W. Wilmer and the author, almost exact reductions of larger glasses, one of which is depicted at p. 266. Those of early tavern and household shape are again illustrated by examples in Mrs. Wilmer's and the author's hands (Fig. 295, 296), and by a brilliant little glass in the cabinet of the latter, of which the excellent shape had soon passed from the wine and

punch glasses to those now under notice (Fig. 297);[1] intermediate or cognate forms will have their places readily assigned by the collector.

Important and highly picturesque examples are the glasses with tall twisted stems and small straight-sided bowls, broken fluted, or indented in their bases, or engraved. Rare as they are, the author has met with five varieties:—(1) A pair

FIG. 297. (One third.)

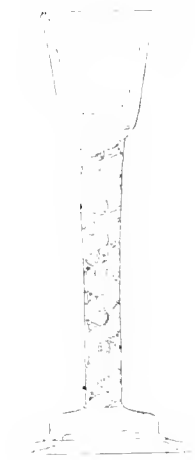


FIG. 298. (One third.)

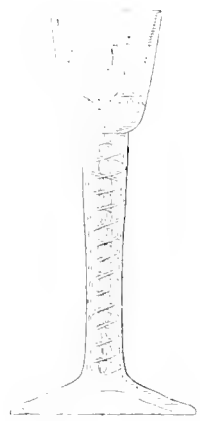


FIG. 299. (One third.)

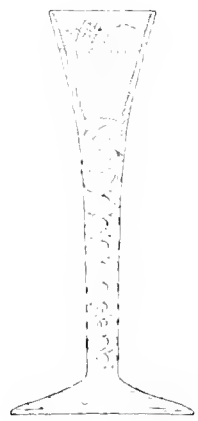


FIG. 300. (One third.)

in the possession of the Rev. R. G. Buckston, with faint broken-fluted, or diamond-moulded bowls, have delicate, opaque-twisted stems of the palest violet colour—perhaps the result of a happy accident—and broad-domed feet (Fig. 298). A charming glass of the same shape, with a plain stem and the bowl engraved with a natural rose and bud, and inscribed round the edge, HEALTH TO ALL OUR FAST

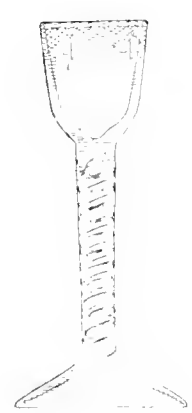


FIG. 301. (One third.)

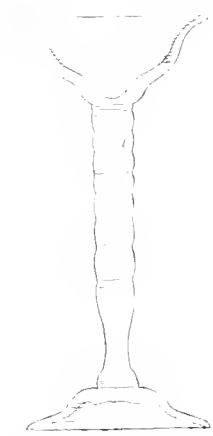


FIG. 302. (One third.)

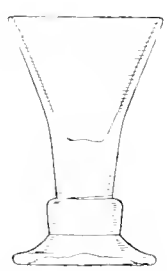


FIG. 303. (One third.)

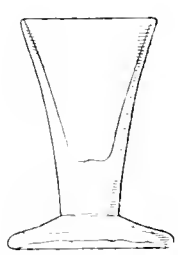
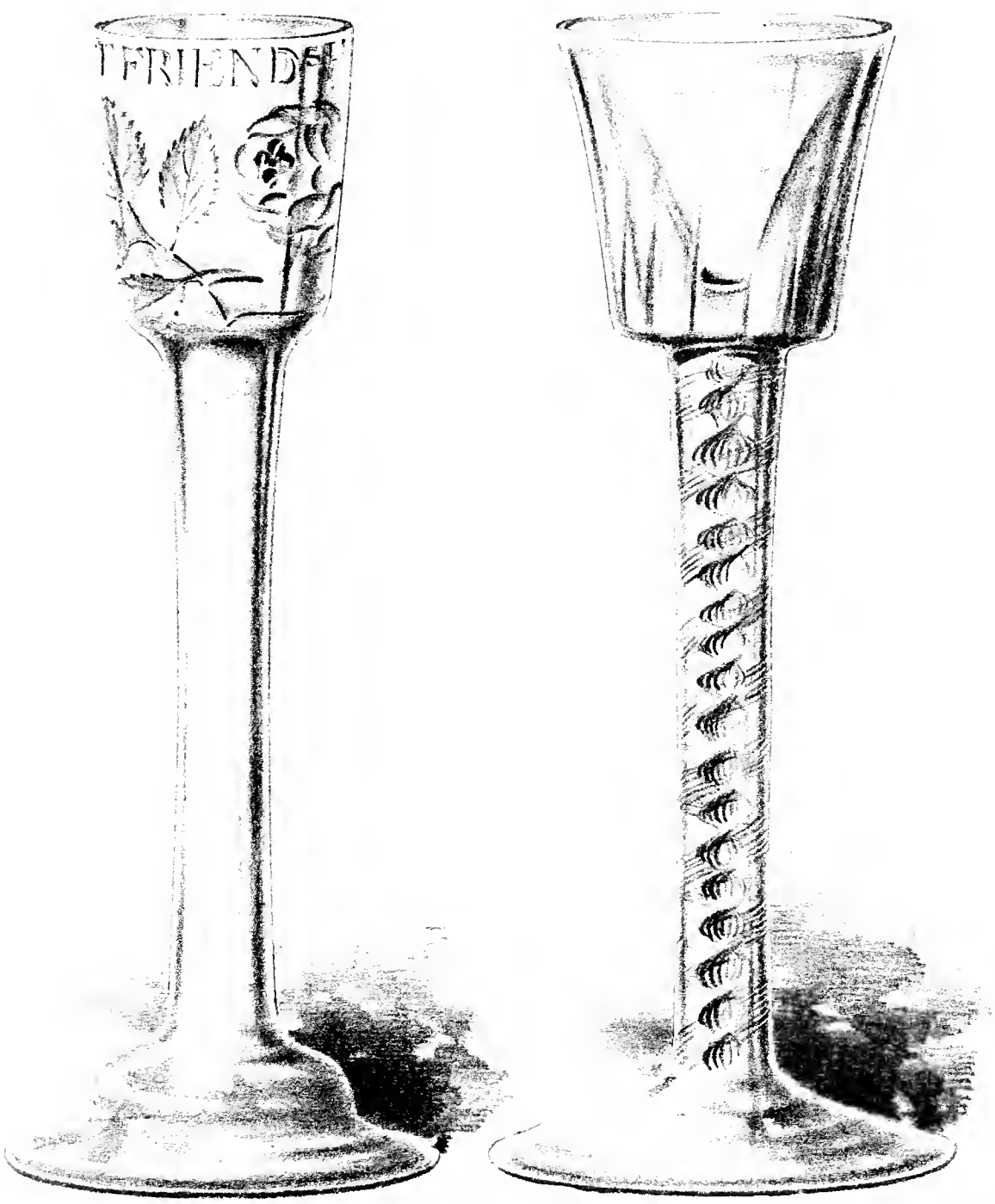


FIG. 304. (One third.)

FRIENDS, is in the possession of the Dowager Lady Williams Wynn. It is probably a Jacobite glass (Plate 52, 1.) (2) A glass with a straight-sided and fluted bowl, with a funnel-shaped interior of much solidity, in the author's cabinet, weighing 9½ ounces, with an opaque-twisted stem of the same character as the first (Plate 52, 2). (3) An opaque-twisted stemmed glass, with a plain foot and the bowl engraved with a bird perched upon a conventional flower, in the possession

[1] See p. 266.



1 2

52.—ENGLISH GLASS.

of Mrs. Fitz-Patrick (Fig. 299). (4) A glass of the drawn form, with a delicate "wrythen" fluted bowl, with a border of conventional flowers, and a brilliant air-twisted stem, in the collection of Mr. Singer (Fig. 300); and (5), a glass with a festooned bowl, and a rich opaque-twisted stem, in the author's hands (Fig. 301). All these examples are, of course, English work, dating from about 1740 to 1780, nothing like them having been made on the Continent. They hold very little, some of them even less than the "deux doigts" alluded to by Béranger in *Ma Grand' Mère*. Mr. R. Day of Cork is the appreciative owner of three others nearly resembling No. 3, two with white twisted stems, and one plain, and all engraved with flowers and, no doubt, deriving like the rest from a glass-house at Bristol, as did other glass vessels to which attention has already been directed.[1] Here may also be mentioned, for want of a better place, a curious glass belonging to the Rev. W. D. Parish, who also has a pair of a smaller size, with a tall buttoned stem and a wide-mouthed wavy bowl (Fig. 302). This

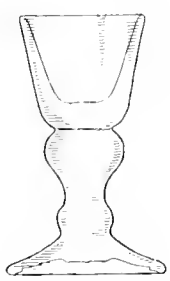


FIG. 305. (One third.)

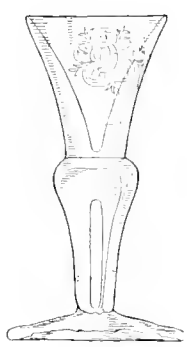


FIG. 306. (One third.)

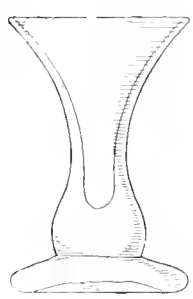


FIG. 307. (One third.)

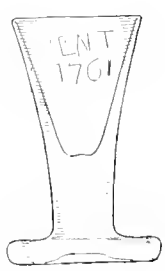


FIG. 308. (One third.)

may be dated about 1730, from its resemblance to the short champagne glasses described at p. 296.[2]

The short, heavy, plain glasses are exactly depicted in Hogarth's *Rake's Progress*, in the four *Election* pictures, and in the drawings illustrating the vulgar *Five Days' Peregrination* of 1732. They are here shown from examples in the author's collection, together with a shouldered rose glass, and a rare old English glass in the same cabinet, obtained about thirty years ago by Mr. J. Ford in Ipswich (Figs. 303-307).[3] "Hogarth" glasses were naturally exported to Ireland. Dr. Banks has one of a wedding set, dated 1761. These were Orange toasting glasses to the memory of King William (Fig. 308).

[1] See p. 282, footnote.

[2] The wide-mouthed glasses are considered by connoisseurs to be the best form for the administration of strong waters on account of their spreading the precious balm over the palate. The *évasé* form of the glasses in use at the establishment of MM. Wynant-Fockink at Amsterdam, for the disposal of "oude klare," is said to date from the foundation of the house in 1679. The shape looks more like 1730. It is very good for its purpose.

[3] Fig. 307.—It came from a sale at Shrubland Hall, and is probably unique.

By this time the consumption of "Geneva print," or, as it had come to be called, "gin," had vastly increased, and the passing of the Gin Act in 1736, which imposed a tax of five shillings a gallon on the noxious fluid, and £50 for every license of sale, caused the queer cry of the ill-regulated and fatuous mob of "no Gin no King." The laws were defied, and the evil increased, so that "Sky Blue," "Holland Tape," "Tytyre," "Royal Poverty," "White Tape," etc., was to be obtained in every back room, garret, and night cellar; the people declined then, as they always will, to be made sober by Act of Parliament, and as Sir Robert Walpole had foretold, it was proved that this was one of the evils which could not be corrected by laws which were too severe. The Act of 1736 was repealed in 1743, the price of gin was raised, and licenses lowered to 20s., but the popularity of this low-class degrading spirit was established. In 1751 Hogarth published his two prints, "Beer Street" and "Gin Lane," designed to show prosperity under the one liquor, and misery and decay under the other.

The short air-twisted stemmed cordial or ardent water glasses are seldom met with. The process of their manufacture did not readily submit to working in so

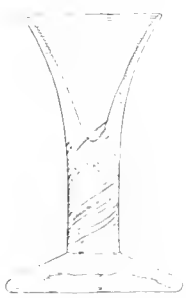


FIG. 309. (One third.)

FIG. 310. (One third.)

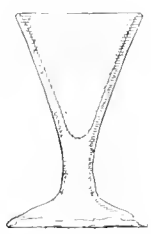


FIG. 311. (One third.)

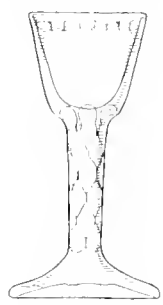


FIG. 312. (One third.)

limited a length. They have their merits, but are very inferior to the graceful drawn glasses so much affected by the Jacobite *Cycle* (Fig. 309). Those with opaque-twisted stems, being built up, were more easily manipulated, and are consequently oftener found, and the short, fluted examples with corrugated or plain feet, about 1740, are very successful (Fig. 310).[1] Similarly, the drawn glasses with "wrythen" fluted bowls and stems, and folded feet (Fig. 311), or with plain bowls engraved with vines and the hovering bird, as well as the faceted stemmed examples with beaded borders (Fig. 312)—like the fluted glasses, quotas from the wine and punch series—are all that can be desired of their kind both for appearance and capacity. Examples of them are shown from the author's collection.

The diminutive drawn glasses of the old tavern and household shape are well illustrated by a precious little glass in the possession of Miss Fenton, $2\frac{7}{8}$ inches

[1] Similar glasses with ruby and opaque white twisted stems were made in Holland and engraved with foliage or with masonic emblems.

high, delicately engraved on one side with foliage and the inevitable hovering bird, and with a bee on the other (Fig. 313). Two plain ones of the same size are in the author's collection, as is also a tiny, straight-sided glass, $2\frac{3}{4}$ inches high, with a moulded stem (Fig. 314). This last takes us across the border and just beyond the limit proposed for the present work. It is a minute version of the common grog glasses which were in general use far into the present century. Finally, in the author's collection is a plain glass bowl for brandy, $1\frac{1}{2}$ inch high, one of a pair which were carried by a quarter master-sergeant on the memorable field of Waterloo (Fig. 315). It is almost a fac-simile in shape of one of Greene's "brandj tumblers." The corresponding glass is in the possession of Mr. H. Norris, to whose kindness the author is indebted for his example.

Glasses, Masonic (XIII.)

In 1717 the Grand Lodge of England was established. The heavy, short glasses, plain, or inscribed with masonic emblems, date originally from the end of

Fig. 313. (One third.)

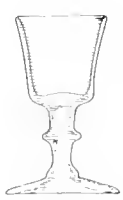


Fig. 314. (One third.)

Fig. 315. (One third.)

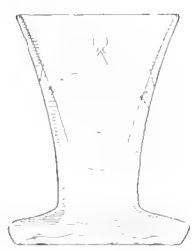


Fig. 316. (One third.)

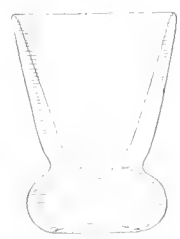


Fig. 317. (One third.)

the first quarter of the eighteenth century (Fig. 316). They have continued to be made, and are, in fact, the modern representatives of a tavern type of the ardent water glasses of Hogarth's time. Examples produced at the present day after the old shape should be easily identified. They are direct survivals, and have a certain old-world quaintness; but they seem likely to be supplanted by a new form of short glass, with a heavy flattened bulb as a base (Fig. 317). These have no artistic merit whatever, and are rather for "firing" than for drinking purposes. Modern Viennese ice glasses are of much the same shape. The great masonic goblets and grog glasses, covered with emblems of the craft, have not been observed of earlier date than the end of the eighteenth century. One of large size, in the possession of Mr. J. T. Ware, of about 1790, is covered with symbols astounding to the uninitiated, including King Solomon seated on his throne. The Rev. W. G. Searle has a great glass with masonic emblems, holding nearly a gallon.

Glasses, Thistle (XIII.)

It is fitting that Scotland should have special glasses for her own mountain-dew, and although the general thistle shape had its origin—unconsciously and undesignedly perhaps—elsewhere,[1] it was undoubtedly beyond the Tweed that a whisky glass was first deliberately formed and detailed like a thistle proper towards the end of the eighteenth century. A thistle glass, with a rough centre under the foot, in the collection of Lord Torphichen, is about 1790 (Fig. 318), and between that date and the present time the shape has been gradually developed and improved. Tall thistle glasses appear to be so seldom met with, that one is here illustrated from the author's collection (Fig. 319); short ones slightly varying in detail are frequent enough, with the same shaped but not very roomy bowl; they are quite modern.[2] Lord Torphichen also has a larger version of the usual form, $4\frac{1}{2}$ inches high; it is modern, and the size is of rare occurrence; but an example of coarse form, 10 inches high, was seen in Edinburgh and kindly sketched for the author by Lyon King of Arms in 1893.

Fig. 318. (One third.)

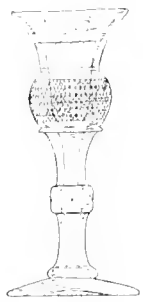


Fig. 319. (One third.)

Glasses, Coaching (XIII.)

It was customary in coaching days at certain inns, where the horses were changed and time was limited, for a number of footless glasses, with a faceted boss at the end of the stem, properly called in ancient days a knot, to be brought out on a tray, standing stems upwards, together with bottles of different "waters." The glasses were taken up by the travellers, filled by the serving-man, emptied by the former and set down again on the spot, for there was no time for dalliance. Though such glasses must have been fairly common at one time, the author has only met with four examples—two in the cabinet of Mr. B. F. Hartshorne

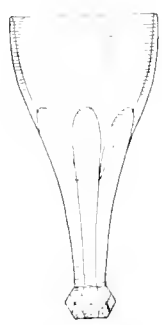


Fig. 320. (One third.)

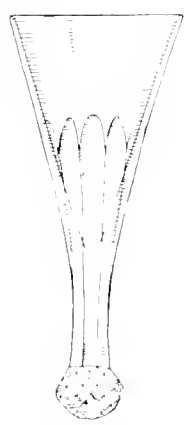


Fig. 321. (One third.)

[1] See p. 290.

[2] Although quite modern thistle glasses may be bought in Princes Street, Edinburgh, for 3s. each, the author saw a self-same pair sold two years ago at a sale in Lichfield for £2 : 16s., under the belief that they were very rare. Another fiction is widespread to the effect that ordinary eighteenth-century drawn tavern glasses, with a "blow" in the stem—euphemistically known as "tear glasses"—are very scarce and valuable. Common modern whisky glasses in Edinburgh are engraved with fern leaves and the injunctions, "TAK IT OOT,"—"IT'S RALE GUD."

(Fig. 320), one remaining in his own collection, a gift from the late Dr. Darwin (Fig. 321), and the fourth broken to pieces in transit to it.

Here, for want of a better place, may be specified the violet glasses for setting in ladies' pin-cushions—a pretty custom which came in at the end of the eighteenth century, and might well be revived a hundred years later.

CHAPTER XXII.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONTINUED—GROUP XIV. RUMMERS, GROG, AND NELSON GLASSES—GROUP XV. TUMBLERS, TANKARDS, AND MUGS.

Group XIV. Glasses, Rummers, Grog, Nelson.

Rummers, as special glasses, were in use at least as early as in Addison's time, because in May 1703 he wrote to Mr. Wyche at Hamburg protesting that he had a desperate design in his head to have attacked him in verse but could not find a rhyme to *rummer*. Rum was then, and long continued to be, the foundation of punch, and its first consumption in its own glasses, without the intermediary bowl, was the inauguration of "hot grog," a solitary, sullen, and dismal drink, as distinguished from gregarious punch in the social bowl, but almost the same thing, though with fewer ingredients. The modern and rather tedious Scotch mode of operation with the tumbler, toddy ladle, and glass, is nothing but a surviving version *en petit* of the punch-bowl process. The oldest rummers proper now met with are of the last years of the eighteenth century; they have a very ugly and massive character, and their shape can bear no relation to those of the time of Addison. The type has lingered almost to the present day, but was long ago nearly overwhelmed by other forms.

Glasses, Grog (XIV.)

Grog glasses generally, apart from those for rum, must also have had their rise in the early part of the eighteenth century, but there is no evidence to show what they were then like. Naturally any fairly large glass would serve the purpose, and one is tempted to claim the strong, round-bottomed, and scarce glasses of the jovial days of the early Georges, with plain stems, and domed and folded feet, as specially suited for grog, but used indifferently for claret, and

probably the large square glasses, of the form which was adopted for cider, also served specially for hot grog in the middle of the century. Mr. J. Frank has a capacious claret or grog goblet of considerable interest, bearing the arms of Robert Clayton, successively Bishop of Killala, Cork, and Clogher, impaling Donellan (Fig. 322).[1] This is a good and early example of a shape that became very popular and was still in full employment for grog in the early years of the present century. No doubt the large, straight-sided, and ogee glasses were also used for claret and grog, but we are perhaps justified in charitably believing that those of which the capacity was between one and two quarts were simply "show glasses," "verres de parade," like the great German "humpen," and not

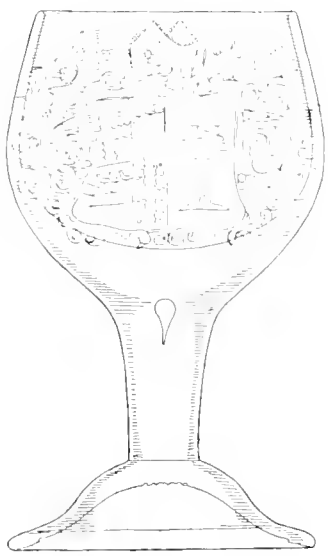


FIG. 322. (One third.)

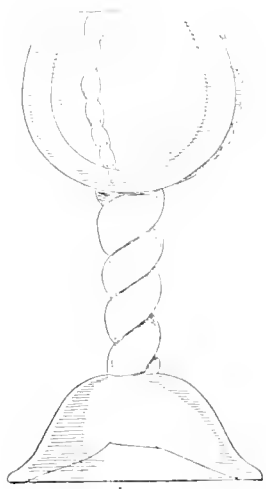


FIG. 323. (One third.)

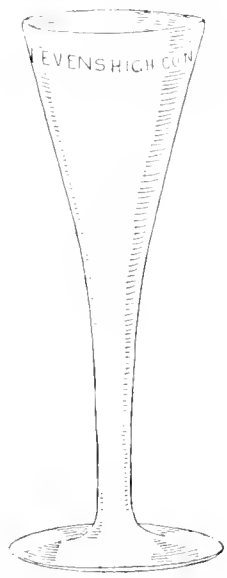


FIG. 324. (One third.)

for use. It may, however, be borne in mind that claret glasses holding a bottleful did not startle or affright society when George III. was King. The description of the "collar glasses" of the Tarporley Hunt Club, and the fading local recollections of the doings of the Pytchley Club at Pytchley Hall stand in evidence. Glass drinking-vessels of enormous size are apt to be rather insubstantial, and from their fragility could never have adequately taken the place of a silver Loving Cup which implied certain formalities of handling and use; neither could they have supplied the position of the great silver tankard of "October"—

[1] He was born in Dublin in 1695, the year of Dr. Busby's death, and educated at Westminster, where he must have often heard the sermons in the Abbey of the shifty, witty South. A learned man himself, he was about to be tried by an ecclesiastical court for his avowed Arian tenets when he died of fever, brought on, it is said, by alarm at the prospect, 26th February 1758. As his tombstone at Donnybrook states—"To enumerate all his good aimable qualities would take up too much room for this place;" it suffices for the present purpose that the episcopal glass has survived.

what Dryden calls the "trusty tankard"—which was passed round at all well-ordered dinner-tables, almost throughout the century.[1]

Mr. Howard Vyse has a pair of very ponderous glasses about 9 inches high, with the bowls vertically ribbed with crinkled appliqué strips, and the stems formed of two rods of glass twisted together like a baker's roll (Fig. 323). These must be grog glasses of about 1750, and are very uncommon and curious. Nearly allied to them are the great drawn glasses known in the time of Charles II. as "blunderbusses," and in this relation may be mentioned the historic "Constable" at Levens Hall, Westmorland, a drawn glass 15 inches high, inscribed round the rim, LEVENS HIGH CONSTABLE, and used time out of mind at the *Radish Feast* to drink the mysterious "Morocco," and "Luck to Levens

FIG. 325. (One third.)

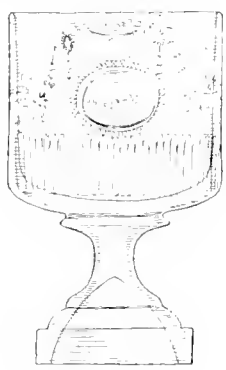


FIG. 326. (One third.)

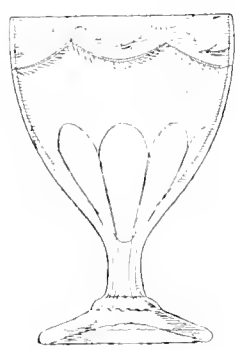


FIG. 327. (One third.)

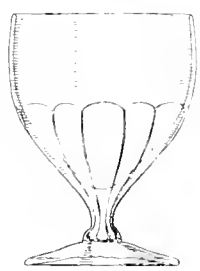


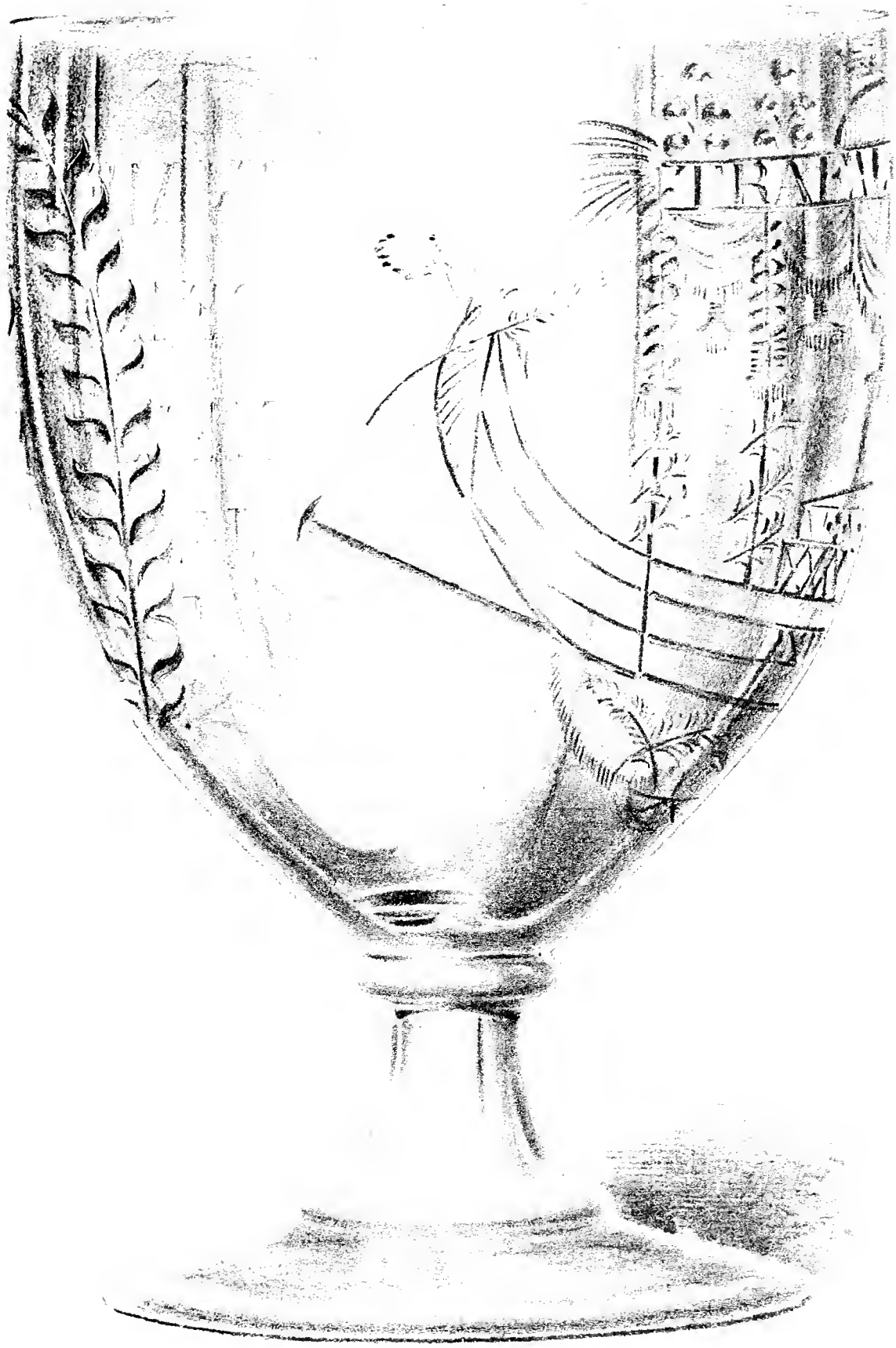
FIG. 328. (One third.)

as long as the Kent flows" (Fig. 324). The glass itself appears to be early eighteenth century, but its use in this way is believed to be a continuance of an old custom of the Bellinghams who lived at the delightful old house of Levens until 1685.

Many very pretty square-footed, cut, and engraved grog glasses,[2] some quite small, were produced from the early years of the last quarter of the century, delicately treated with festoons, beadings, flutes, and flowers (Fig. 325), and often bearing the owner's initials on a rectangular or oval panel, as in an example in Mr. J. Hawkins's collection (Fig. 326). These somewhat gave way before the end of the century to moulded and fluted goblets, large and small, of some merit, engraved with ribbons and festoons after the Adams fashion, and often oil-gilded. Glasses in the author's collection exemplify these (Figs. 327, 328). Such vessels

[1] In the Saffron Walden Museum is a vast glass goblet, 13 inches high, made about 1820 for Miles Rust, of the Greyhound Inn at Swaffham, who died in 1844, aged eighty-seven. It must have served as a punch bowl. It is engraved all over with hunting, coursing, and shooting scenes, and a representation of a famous cricket match between Swaffham and Hingham. A view of Norwich Castle, and Swaffham windmill, a well-known local beacon, appear in the landscape. This monster glass was probably made at Lynn, a port which, with Alum Bay, in the Isle of Wight, has long furnished silica for glass-making.

[2] See p. 293.



53.—ENGLISH GLASS.

are sometimes met with painted with designs in the manner of Angelica Kauffmann. All of them passed into the nineteenth century where we take leave of them.

Glasses, Nelson (XIV.)

Though the limits of the present work have been fixed at 1800, the border must be incidentally crossed sometimes, and it may be once, deliberately, for the sake of the Immortal Hero. In the possession of Miss Hartshorne is a large straight-sided goblet, 8¼ inches high, engraved with Nelson's Funeral Car, in the shape of a vessel, with Victory at the prow holding in one hand a wreath, and in the other a branch of bay. On the sable-plumed canopy is inscribed TRAFALGAR, below the coffin NILE, and on the stern VICTORY (Fig. 329). This glass cup was presented by Mrs. Mary Ann Kilwick, widow of an officer of the *Victory*, to Mrs. Sophia Barbara Duffield, born Kerrich, who gave it to her niece, the present possessor. Mrs. Kilwick stated that each officer of Nelson's ship had such a glass; its pedigree is therefore fully assured. In 1873 the author bought in Sardinia Street, Lincoln's Inn, for eight shillings, a still larger glass of goblet form, 8⅝ inches high, like the example just mentioned in perfect condition, containing more than a quart and a half, engraved on one side with precisely the same funeral car—no doubt traced and worked by the same hand, and on the other side, within a wreath of laurel—

Fig. 329. (One third.)

IN MEMORY
OF LORD
NELSON
JAN^{Y} 9 1806

This was the day of the funeral in St. Paul's, and the glass is an inscribed example of the Victory series, which must have now become very rare (Plate 53).[1]

The author is indebted to Mr. T. H. Baylis, Q.C., for the following *note* upon

[1] In the account given by *The Times* on the occasion of Nelson's Funeral, together with a woodcut of the Car, it is stated that in consequence of a change in the orders at the last moment the coffin was completely exposed to view; it is so exhibited on the glasses. The pall was not thrown over the coffin with the coronet upon it, as at first contemplated, but laid on the stern of the Car, and the coronet carried in a mourning coach. Dean Milman, then a boy of fifteen, has recorded his recollection of the wailing of the sailors as Nelson's coffin sank out of sight under the dome of St. Paul's. The Car was long preserved in the Painted Hall at Greenwich, where the hero's body had lain three days in state. The sable equipage having fallen into a somewhat dilapidated condition, it was ordered in 1823, by Mr. Locker, then Secretary of the Hospital, to be removed to a gallery at the foot of the dome over the chapel. This proceeding naturally gave great dissatisfaction

Nelson's famous signal, given to him by Captain John Pasco, in the autumn of 1846, at the Falmouth Royal Yacht Club:—"I had the honour to suggest the substitution of the word *expects* for *confides*. Lord Nelson had chosen the latter, but it not being in the Vocabulary must have been spelt, and have taken more time than could have been spared (as we were close on the enemy) and the word *expects* only required one number. After it had been answered his Lordship ordered me to make the signal (No. 16) for close action, and to *keep it flying*.

"(signed) JOHN PASCO,
"senior and signal officer of the *Victory* 21st of October 1805."

A large Nelson "memorial glass," as distinguished from a "funeral glass," is in the possession of Mrs. Fortnum. It is 9 inches high, and inscribed with the name of NELSON with an anchor in a wreath below it, the initials of two maternal ancestors of the owner, and the date 1806, and engraved with bunches of hops, barley, and grapes, and round the rim is the Greek fret. Many of these glasses must have been made.

Mr. H. Norris has a rummer engraved with the *Victory* under full sail, and within branches of bay—"In memory of Lord Nelson, Oct. 21, 1805," the date when he was shot by Robert Guillemard from the shrouds of the *Redoubtable*.

FIG. 330. (One third.)

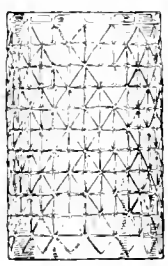


FIG. 331. (One third.)

In the Museum in Greenwich Hospital is a very pretty cylindrical tumbler, $3\frac{3}{4}$ inches high, sprinkled all over with small engraved sprigs, and bearing, in a festooned oval, the initial F for Frances, Viscountess Nelson (Fig. 330). Another glass of the same shape, 4 inches high, with the whole surface delicately faceted in polished lozenges, is said to have been the Admiral's favourite glass on board the *Victory* (Fig. 331). An ogee wine-glass, $5\frac{1}{2}$ inches high,

to the public. The Car was soon after taken to pieces and, it is said, distributed to applicants for relics of the great Admiral. The odd part of the story is that, at the present day, nothing whatever is known, either at the Admiralty or at Greenwich Hospital, as to the untimely fate of this national relic, whose accurate presentment has survived upon a fragile glass. It may here be stated that the Funeral Car of the Duke of Wellington, designed by the late Professor Cockerell, was in 1854 exhibited at Marlborough House, in a temporary building in connection with a school of art presided over by Mr. Hermann. This Car is now in the crypt of St. Paul's Cathedral. In the nature of things it must eventually fall into decay and be abolished. It is to be hoped that when this time comes its end may be properly recorded.

In France numbers of glasses and tumblers were decorated with medallions of Napoleon in pale silver gray clay, incrusted in the glass by the crystallo-ceramic process, introduced from Bohemia about 1780.

octagonally fluted, and engraved with the letter N for Nelson, is in the British Museum.

Group XV. Glasses, Tumblers, Tankards, Mugs.

Glasses of the tumbler form have already been often alluded to in the course of the present work. Their early origin is assured by the extraordinary collection of examples of Roman times found at Pompeii, fluted, spotted, and plain. From the simplicity of its manipulation, which is as natural and easy as that of a flask, the tumbler form is such as may be expected in early times. And this is the shape of many of the somewhat primitively formed glass vessels which appear in the Low Country pictures before the arrival of the Italians, and counterparts of which must have been produced in Sussex in common green metal, as alluded to by Charnock in 1557, and spoken of by Harrison thirty years later.[1] It is probable that the "Ordinary Drinking Glasses for Beer," specified by Mansel in his Suit to the Lords of 1639 (?) as being made by him for four shillings a dozen, were of the tumbler form, and resembled those made for Greene in Venice, plain or ribbed, to suit the English requirements. It is to be observed that the width of the tumblers of Greene's time is almost exactly the same as their height, the sides very slightly sloping. These are the distinguishing characteristics of many of the tumblers in the early Low Country pictures, and the shape appears to have endured here until the end of the seventeenth century. With the advent of tumblers from Silesia and Bohemia to the Provinces, after the Peace of Utrecht of 1713, the form was introduced much as we have it at the present day, namely, tapering from the rim to the base. Many large tumblers of the early half of the eighteenth century are met with on the Continent, and have made their way in our own time, in default of better, as "works of art," to England. They are generally rudely engraved with deep circular or oval depressions, flutes, and coarse stars (Fig. 332), some of the better sort being adorned with incidents in the lives of classical gods and goddesses, and busts of German potentates, in armour and sublime periwigs, and bristling with warlike trophies (Fig. 333). They are usually hopelessly dull, uninteresting, and ugly, but the English examples of the same time, in better glass, with their highly-polished cutting of rather lighter character, have some little artistic merit, as have also those engraved with large parcel-polished flowers.[2]

[1] See pp. 150, 164.

[2] The double Bohemian covered cups and tumblers in ruby or white glass, with subjects etched through gold or silver leaf, naturally occur to the mind at this point. They belong to a higher class of work and a later period, and are touched upon in the Introductory Notices, p. 78.

Mr. W. Money has an English tumbler, 5 inches high, engraved with sporting figures of the end of the reign of George I. (Fig. 334); and Mr. J. Ford has another of the same date, decorated with a man on horseback within a foliated cartouche. Another tumbler, 5 inches high, in private hands, is covered with diamond-etched trophies or emblems of Music, Conviviality, and Love, with the following doggrel below:—

> Music and Love the Savage World refin'd
> They form the Manners while they raise the Mind
> Gave Man a Foretaste of the Joys above
> For what is Heaven but Harmony and Love.

On the mouth of the *cor de chasse* is etched "Giles 1756," the name of an

Fig. 332. (One third.)

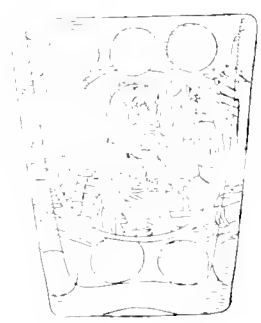


Fig. 333. (One third.)

Fig. 334. (One fifth.)

engraver at York. As a dated example, and giving the name of a practitioner of an art so rarely exercised in England, the glass has considerable interest. There is nothing in the tumblers from this date to the end of the century that

Fig. 335. (One third.)

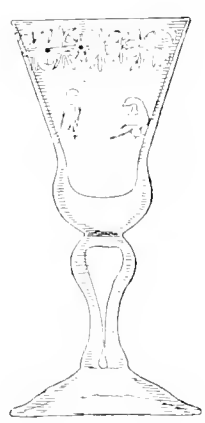
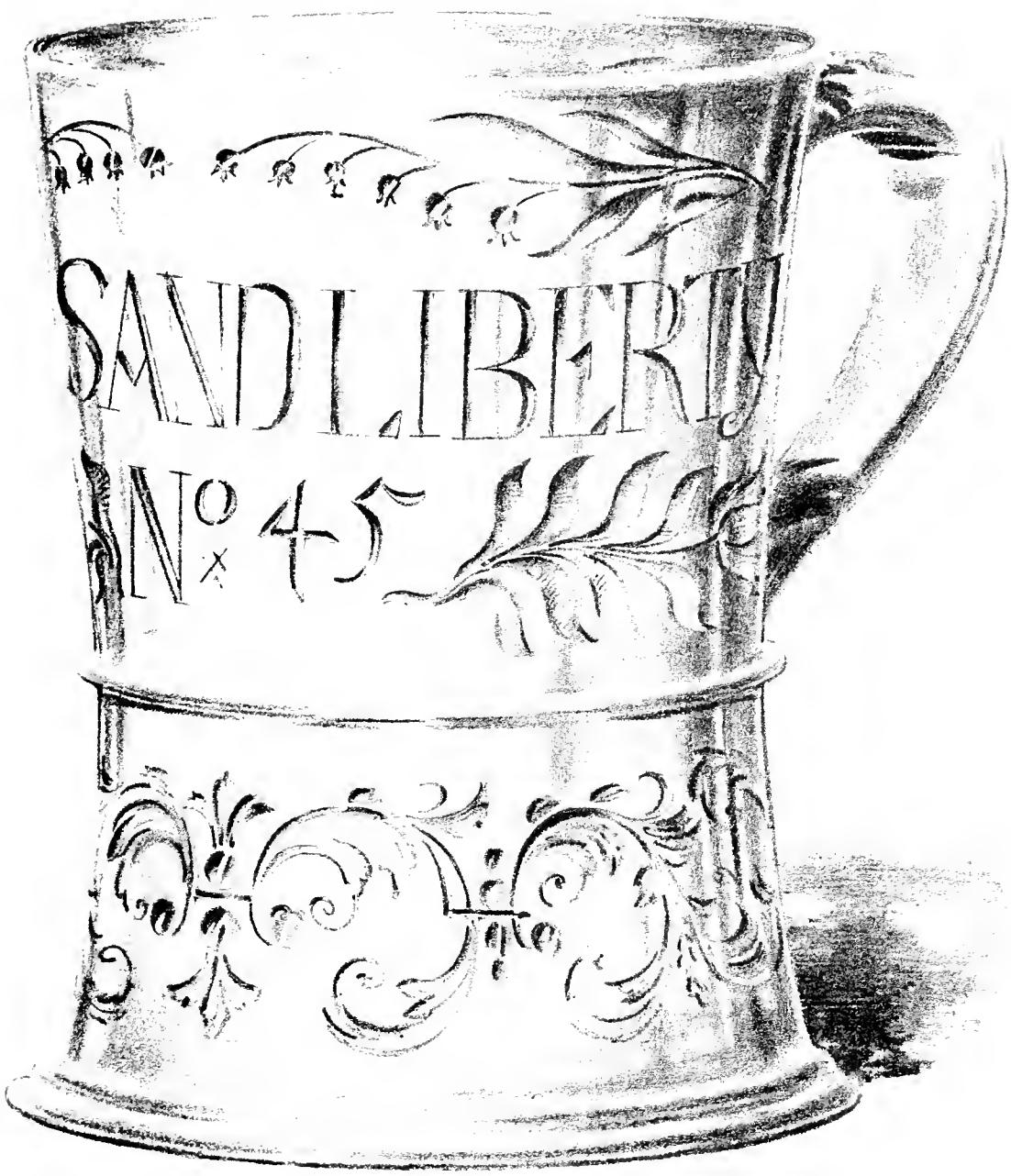


Fig. 336. (One third.)

calls for special remark, save that they were sometimes inscribed as "Success" glasses—answering to the Low Country "Welwaaren"—in the interest of sailing vessels; gaudily painted, inscribed, and dated for "Gifts," "Martages," and "Fairings"—such as would have been bought at Boughton Greene, or Gaywood



54.—ENGLISH GLASS.

Fair, and, like the wine-glasses, cut with festoons at the end of the century. The tumblers inscribed "KING"—"TINKER," of about 1800, with invisible perforations through the fluted rim over "KING," illustrate a sorry practical joke in which the liquor trickled down the waistcoat of the loyal drinker. Mr. H. Willett has an example (Fig. 335). The trick also obtained in the Low Countries. Monsgr. de Béthune has a pair of wine-glasses, fifty years earlier, with a border of rosettes with holes pierced through them on one side for the same purpose (Fig. 336).

GLASSES, TANKARDS (XV.)

The glass tankards are usually of superior character to the tumblers and mugs, and are distinguished by their splayed lower edge, following the plain, straight-

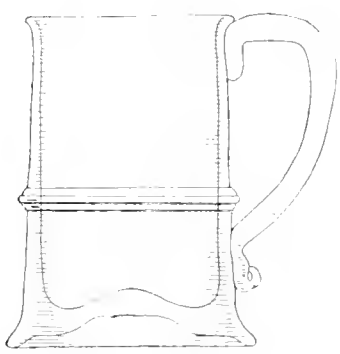


FIG. 337. (One third.

FIG. 338. (One third.)

sided, or slightly bulged silver tankard form. They are occasionally banded half-way down, with excellent effect, and engraved with conventional flowers, arabesques, and inscriptions; some may be as early as the time of George I. (Figs. 337, 338). A good example is furnished by a tankard in the collection of Mr. A. Wallis, inscribed in large letters, WILKES AND LIBERTY N°. 45, in allusion to an article of special virulence attacking the Government, in that number of the *North Briton*, by John Wilkes[1] (Plate 54). This brought about the issue of "A General Warrant," a dangerous proceeding, since pronounced to be illegal, and was the beginning of the conduct which brought into prominence a disreputable celebrity of the moment, and exalted him into a champion of the people when

[1] Wilkes at one time had the quasi-misfortune of the friendship of the Duke of Grafton. In a letter from *Junius* to the Duke, 10th April 1769, he thus alludes to it, in the course of a trenchant criticism: "But let Mr. Wilkes's character be what it may, this at least is certain that circumstanced as he is with regard to the public, even his vices plead for him. The people of England have too much discernment to suffer your Grace to take advantage of the failings of a private character, to establish a precedent by which the public liberty is affected, and which you may hereafter, with equal ease and satisfaction, employ to the ruin of the best men in the kingdom."—*The Letters of Junius*, p. 65, edit. 1786.

"the British Lion" was declared to be "roused."[1] Wilkes was twice expelled from the House of Commons, but returned for Middlesex at five successive elections, and at last suffered to take his seat in 1774. The very curious glass which recalls a tumultuous episode was unhappily shattered in 1888.[2]

Glasses, Mugs (XV.)

When the glass tankards lost the old tankard form, with the splayed lower edge, they became handled mugs, and are met with generally in small sizes,

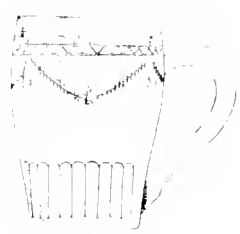


Fig. 339. (One third.)

Fig. 340. (One third.)

Fig. 341. (One third.)

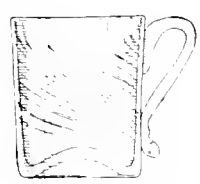


Fig. 342. (One third.)

decorated in vivid colours, or cut with flutes and festoons after the style of the last quarter of the century, and sometimes blue-edged (Fig. 339). A few footed glass

[1] The excitement which Wilkes so long caused throughout the country is difficult to realise at the present day. The following extract from a private letter shows what happened on the reversal of his outlawry in 1768 at so distant a place as Lynn:—"I think you must have heard what a Public Spirited Town Lynn is, it proved itself so when Mr. Wilks had his Outlawry reversed, we was illuminated, (a Compliment too great however to pay the King on his Birthday) there was few of Sr John Turner's friends who had any lights out, we little folks in High-street must do as the Mobility directs under pain of having our Windows demolished, which I believe we should have been bold enough to have hazarded had my Papa been at home, but it happen'd very unluckily he was in Lincolnshire, If you take the Public Papers I imagine you have seen an account of all the Mad Frolicks of our Drunken Mob, which notwithstanding is stiled by our Patriotic gentry a love of liberty. I suppose we shall have matter sufficient to fill all the Newspapers both Town and Country, for no less Person than the formidable Mr. Wilks is to be in town next Week if acquited, but I will say no more about him, least as he bewitches people at such a Distance he may change us intirely when he comes so near."—S. Hollingsworth to Matilda Kerrich, June 20, 1768, *Original Correspondence*, 1638-1828, *ut sup.* vol. xv. p. 294, in the possession of Albert Hartshorne.

[2] The following receipt for mending glasses appears in *The thyrde and last parte of the Secretes of the reuerende Maister Alexis of Piemont*, etc. "Englished by Wilham Warde 1566, the fourth Booke, Folio 64:"—

"For to soder Glasses.—Take Minium, and halfe as much of quicke Lyme & the Meale or flower that hangeth on the mille sides or walles, and the yeke of an Egge, in all this let a Lynnen clothe be weate and holden before the fyre that it

tankards are met with, usually of large size, but approaching the jug form, sometimes with a coin inserted in the bottom. Mr. J. G. Waller has such an one containing a sixpence of George II. In the Saffron Walden Museum is an interesting mug, unfortunately broken, 7 inches high, engraved with the arms of Winstanley who perished in the first Eddystone Lighthouse, of his own construction, in the great storm of 26th November 1703. Mr. W. M. Baylie possesses a fine example engraved with hops and barley, and the cypher "G.P.H.f. 1789" (Fig. 340). Smaller footed mugs, following the shape of some late tankards, are of the end of the century, and coeval with the pretty little mugs, handled and unhandled, engraved or painted with festoons and flowers (Fig. 341). These again carry the inquiry beyond the confines of the eighteenth century.[1] Handled "orgeat" and lemonade glasses (Fig. 342) occur in a Renishaw glass bill for 1795.[2]

may be clammye, meete for to cleaue or stycke fast and so lay it faire and softly upon the broken place of the glasse."

Stems of glasses are mended with—1, a glass ring, as in an example in the Musée Archéologique at Liège; 2, with a silver band and foot, as in a drawn tavern glass in the possession of the Rev. H. E. Taverner; 3, with an iron band, as in a Jacobite glass inscribed "audentior ibo," in the possession of Mr. W. Murray Threipland; 4, with a tin band and a modern foot, as in a tall cordial water glass in the author's cabinet; and 5, with a turned boxwood ring, as in a drawn tavern glass in the same collection. Attempts have often been made to reunite the broken stems of old glasses by means of the blow-pipe. The tendency of the old metal to fly to pieces makes this process very difficult, and success doubtful. But a modern German foot can occasionally by this method be welded to an old stem.

[1] The glass tankard and mugs, like the modern claret jugs, generally fail in their attached handles. The application of glass handles was thoroughly understood by the Romans. Witnesses are the broad-reeded grips of their great funeral and ordinary domestic vessels, and the elegant splayed and ribbed handles which firmly clasp the necks and grip the bodies of the Roman glass jugs and amphorae.

[2] See Appendix, Inventories, No. XI.

CHAPTER XXIII.

CLASSIFICATION OF EIGHTEENTH-CENTURY GLASSES CONCLUDED—GROUP XVI. FLUTES, YARDS, HALF-YARDS, HORNS, BOOTS, HATS, MORTARS, SALT-CELLARS, AND GIRANDOLES.

Group XVI. Glasses, Flutes, Yards, Half-yards, Horns, Boots, Hats, Mortars, Salt-cellars, Candlesticks, Girandoles.

The improbability of very tall glasses of the flute form—to adopt the well-known continental name—having been made in England for champagne on its first introduction here has been spoken of at p. 295, and there is nothing about them in Greene's correspondence, or in his outlines for Rhenish or other High Country wines. We know precisely what the Low Country *flûtes* were like from their representations in the Dutch and Flemish pictures, and from examples that have been preserved. There are, for instance, a pair, about 2 feet high, in the Steen at Antwerp, and they frequently appear in the still-life pictures, notably in those by John and Cornelius de Heem, and the younger Teniers. In the portrait by Rembrandt of himself, with his wife on his knee, in the Königliche Sammlung at Dresden, that supreme master holds up a tall glass, distinctively a Passglas and not a *flûte*.

Flutes are of two kinds: those in which the long tapering body descends upon a bulb forming part of the stem and resting upon a moulded base and foot, after the Venetian manner, and the Low Country "façon de Venise"; and those succeeding them in which the tapering flute rests directly upon the foot. Obviously the latter shape was easy to make, and it is of this kind and not of the former that examples would have been produced in England, and as far as we have been able to ascertain, not before 1680.

With regard to their length, that was only a question of having a sufficient mass of metal under manipulation for the drawing out, and not a matter of

difficulty. Consequently, when the idea of a long glass had once been introduced from the Low Countries, we may expect that glasses of abnormal length would have been presently fashioned here, but naturally at first rather as "tours de force" of glass-makers than as objects for ordinary use. The health of a King at his Proclamation would be just such an occasion when an extraordinary glass should be employed, and we find the following entry in the Diary of Mr. Evelyn :—

"1685, 10 Feb. Being sent to by the Sheriff of the County to appear and assist in proclayming the King, I went the next day to Bromely, where I met the Sheriff and the Commander of the Kentish Troop, with an appearance, I suppose, of about 500 horse, and innumerable people, two of his Majesty's trumpets and a Serjeant with other Officers, who having drawn up the horse in a large Field neare the towne, march'd thence, with swords drawne, to the market place, where making a ring, after sound of trumpets and silence made, the High Sheriff read the proclaiming titles to his Bailiffe, who repeated them aloud, and then after many shouts of the people, his Majesty's health being drunk in a flint glasse of a yard long, by the Sheriff, Commander, Officers, and cheife Gentlemen, they all dispers'd and I return'd."[1]

To consider that a choice flute glass of a yard long had been specially brought by one of the gentlemen of Kent for so loyal a purpose is not a large demand upon the imagination, and that it took the form of a plain, tapering cylinder or attenuated cone, upon a foot, we may assume from the appearance of the tall flutes in pictures of the time. No example of a yard-long English flute of this period has survived, it is not to be expected; but versions of the shape exist in a much smaller scale with straw-drawn stems supporting funnel-shaped bowls. Such are those preserved in the Slade Collection, $9\frac{3}{4}$ inches high, in the Amsterdam Rijks Museum, said to be Venetian, and in the collection of Sir F. Boileau, 10 inches high. A pair with a collar or neckband, about 1790, 14 inches high, is in the author's possession (Fig. 343). But the provenance and dates of the short flutes found in England, whether tapering or with the more delicate funnel-shaped bowls on straw-drawn stems, are difficult to determine; the form alone tells us nothing, because that is such as would be produced by the same manipulation in any glass-house. The character of the metal is, therefore, the best criterion both as to date and origin; but there must always remain the

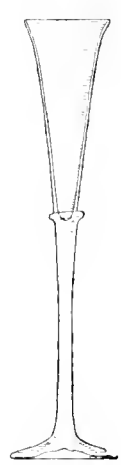


FIG. 343. (One sixth.)

[1] *Diary*, p. 468, edit. W. Bray, 1890. This mention of a "flint glass" in 1685 is a valuable piece of evidence; it can only refer at that date to the new metal which we have said was introduced by Tilson in 1663.

difficulty in distinguishing an early eighteenth-century drawn Liège flute from an English one of the same period.[1] In this particularity the collector's knowledge of "ring" and gravity will be appealed to. The short flutes gradually became merged into the drawn tavern and household glasses, passing through some graceful phases of form, the most important being the glasses engraved on the edge with arabesques, and made both here and on the Continent.

Glasses, Yards, Half-yards (XVI.)

With regard to yard-long glasses proper, they are of two kinds, the one a vague measure of capacity and length, and the other a trick. The former was used for drinking something approaching to a yard of wine or ale. It was an arbitrary measure—like the Cambridge "yard" of butter, which was a pound's weight whether rolled thick or thin—and was sometimes also called an ell-glass, and contained an amount varying from a pint to a quart. The oldest glasses of this

Fig. 344. (One sixth.)

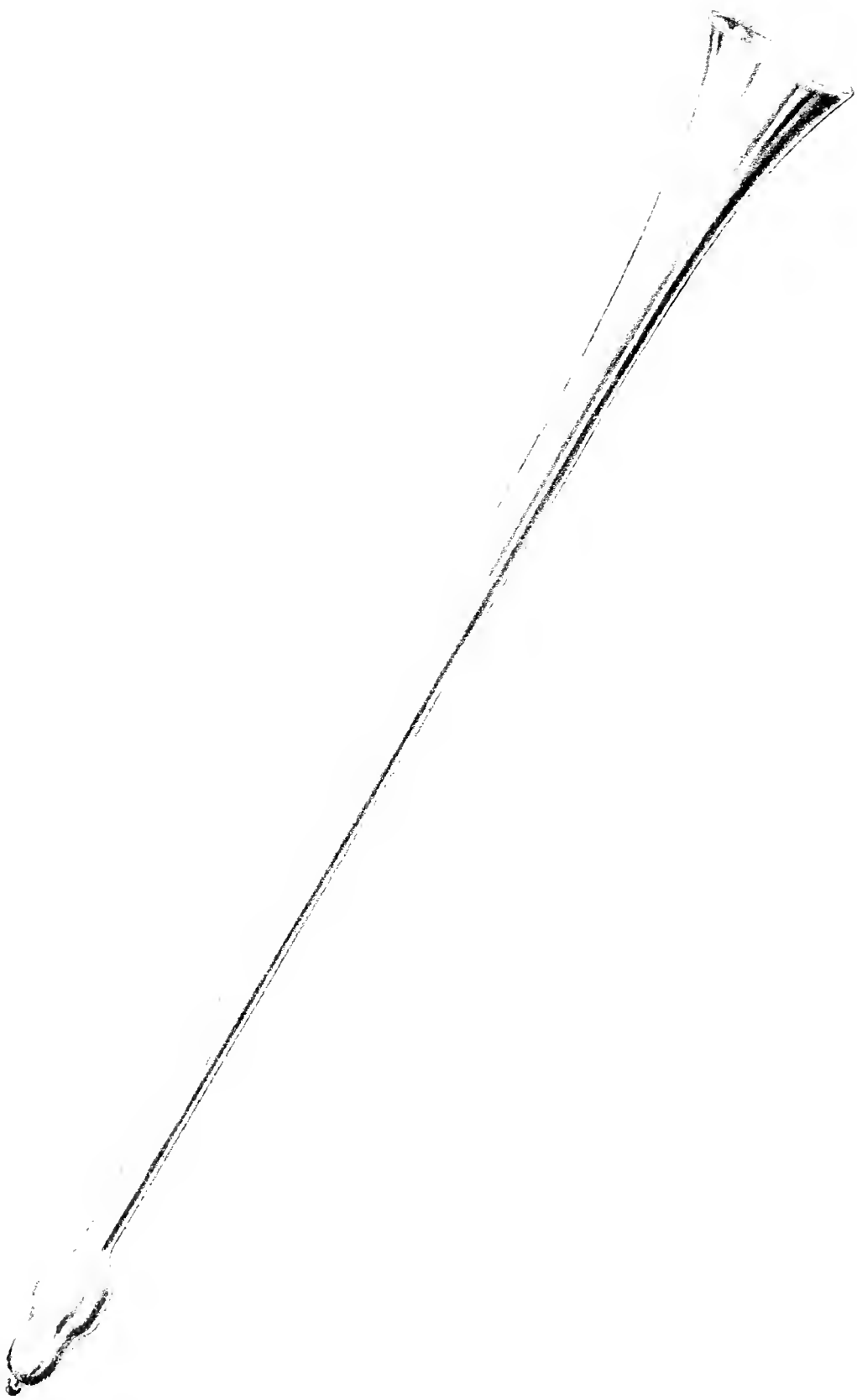
Fig. 345. (One twelfth.)

Fig. 346. (One twelfth.)

sort for the purpose in question were, as we have seen, used in England in the last quarter of the seventeenth century, and they probably soon became, to a certain extent, popular. But their fragility and their unwieldy shape must have forbade their use save on special occasions. Mr. Cuming tells us that they were made with feet and without. He instances an example of the footed ale-yard glass, and, writing in 1872, shows from information he had received that the ale-yard and its divisions into halves and quarters was then to be found in many country inns.[2] Such is certainly not the case at the present day. It seems that the yard-glasses and their divisions were footed vessels, generally imperfect as to

[1] See Introductory Notices, p. 54.

[2] "On the Ale Yard, or Long Glass," *Journal of the British Archæological Association*, vol. xxxviii. p. 174.



55.—ENGLISH GLASS.

measure and fluctuating as to capacity, but a pair of half-yards in the possession of Captain Darwin are exact in their height (Fig. 344). Sir Henry Dryden found a rather crooked yard-glass, with a turned wooden knob at the end, replacing a glass foot, or a bulb, in the Wrestlers' Inn at Cambridge in 1843 (Fig. 345). When complete the glass was about 4 inches less than a yard.

The trick yard-glass arose from the knob at the end of a footless one. It was found that on expanding into a bulb the knob or "knot," the difficulty of emptying the vessel was greatly increased, because when this feat was nearly accomplished, the air passed down the tube into the bulb, and caused the remainder of the liquor to fly in the face of the drinker. It was customary when George III. was king, and when yards of ale were much in vogue, to hang up these glasses in the common room of inns by coloured ribbons, and to produce them for the practice of neophites, with betting upon the results. As might be expected, much rough horse-play ensued, often ending in the destruction of the glasses; this is the cause of their rarity at the present day. An excellent example, with a wavy bulb, and exactly one yard long, is in the possession of Mr. J. Mortlock, and a facsimile is in the author's hands; each contains one pint precisely (Plate 55). In the Norwich Museum is a similar glass, but with a solid, spherical, and slightly fluted knob, and another 26 inches long, with a bulb $4\frac{1}{2}$ inches in diameter (Fig. 346). In the Saffron Walden Museum is an example 1 yard and 8 inches long, with a bulb at the end shaped like an acorn. This had long been in the family of Emson, of Wimbish, an obscure village in Essex, known to a few antiquaries by its interesting little military brass in the church, of the time of Edward II. The "Luck of Cefn Mably," preserved in Mr. Kemeys-Tynte's historic old house, is a glass about a yard long, with a bulb at the end, and appears to be of the early part of the eighteenth century.

At the annual "Vinis" of the mock corporation of Hanley in Staffordshire, the initiation of a member in 1783 included the drinking of a yard of "port" or "white." The test of admission to the freedom of the corporation of Stoke-on-Trent was the drinking at one draught of a yard-long glass of ale.[1] To "floor the Long Glass" at Eton is an accomplishment to which many aspirants never succeed in attaining.[2]

[1] Ward, *Borough of Stoke-upon-Trent*, p. 367, edit. 1843.

[2] At Overton, Flintshire, was a convivial club, of which the qualification for membership consisted in the ability to empty at one draught a carved and silver-harnessed cocoa-nut filled with any liquor of the drinker's choice, whether wine, ale, or spirits. A book was kept in which the drinkers' names were entered, and notes of their experiences of the effects of the performance and the manner of doing it. Both Qualification Cup and book are preserved at Nerquis Hall.

Glasses, Horns (XVI.)

Allied to long glasses are those in the shape of horns; they were made in a slightly curved form in Anglo-Saxon times; there is a Merovingian example in the British Museum, from Bingerbrück, opposite Rüdesheim, which must be unique. One in delicate sea-green glass of the early part of the sixteenth century is preserved in the Germanisches Museum at Nuremberg; and two others—rather later, the one in white glass, ringed or banded, the other garnished or harnessed in blue—are in the small but choice collection of glass vessels in the Städtisches Kunstgewerbe Museum at Cologne. All these are slightly curved, the blue-garnished horn at Cologne being also looped by half a turn, like a post-horn. Whether the users of these glass horns applied them first for drinking by inserting a plug, and then, by removing it, for faint music to show that they were sober, according to the practice of ancient times with natural drinking-horns, we cannot tell; doubtless any trumpet under such conditions was apt to give an uncertain sound. But one cannot look at those in question without recalling Ostade's etching of the picturesque man, with his bugle-horn, at the lattice window, and with open doublet "blowing bloudy soundes" from the dexter side, as foreigners and Scotsmen should, according to the heralds. Pepys records a visit in 1669 to the glass-house in Blackfriars, where he "had several things made with great content; and among others I had one or two singing-glasses made, which make an echo to the voice, the first that ever I saw; but so thin, that the very breath broke one or two of them."[1] This result seems to point to something that was blown into, giving "a distinction in the sounds," possibly of the trumpet form. We know that a glass horn can be played upon from information concerning a thin and slightly spirally twisted example of the coach-horn shape—the popular "yard of tin"—17 inches long, and 2½ inches in diameter at the larger end, in the possession of Mr. S. A. Gurney. Mr. P. H. Bate has an excellent little post-horn in pale green glass, seemingly Flemish.

Glasses, Boots (XVI.)

In the Notes and Illustrations to *Waverley*,[2] Scott alludes to a cup, apparently of silver, in the form of a jack-boot in the family of Scott of Thirlestane—that is,

[1] *Diary*, February 23, vol. v. p. 120, edit. 1849.

[2] Vol. i. p. 91.—A stirrup cup was not charged in the bill if presented by the landlord of an inn to a guest. Sir Walter Scott gives a comical account of a sound judgment pronounced by a bailie upon "a stirrup cup" drunk up accidentally by a cow, which would lose here in a curtailed form.—See Notes and Illustrations, vol. i., *Waverley*, p. 92, edit. 1833.

the holed or thirled stone—in Roxburghshire, used as a stirrup cup. Glass boots are almost as scarce as "glass" slippers. They are of the limited capacity which suggests strong waters rather than "neat port" or "searching canary." A capital jack-boot glass, $5\frac{1}{4}$ inches high, is preserved in the Musée Archéologique at Liège, strapped and spurred, and welted with blue and, save for the quilling up the front, a model of just such boots as "the Madman of the North," and the Earl of Peterborough might have worn (Fig. 347). A pretty boot of the same time, rayed yellow, is in the Steen.

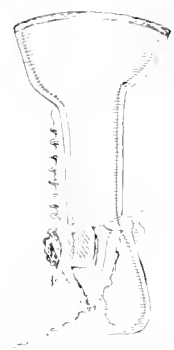


Fig. 347. (One third.)

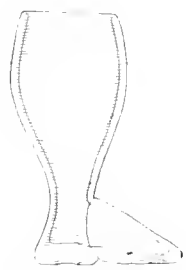


Fig. 348. (One third.)

The oldest English examples that have fallen under the author's notice are of the time of George III. and may have been made in honour, or rather in contempt, of Lord Bute, who was hated with an unexampled fury, and whose emblem, the Boot, was burnt by the mob, as Thackeray reminds us, in a thousand bonfires.[1] Mr. Cuming has a short boot, $4\frac{1}{2}$ inches high, quilled at the back; a plain one of the same size is in Mr. Fretton's possession (Fig. 348), and the author has one an inch shorter. All these glass boots date from about 1765, and may, we believe, be taken as reminiscences of the hated friend of the Princess Dowager.

Glasses, Hats (XVI.)

Cocked-hat glasses are of two kinds—the one in which the bowl, and the other in which the foot, is cocked. Of the former an example is in the author's collection, the edge of the funnel-shaped bowl being folded, and that of the foot plain (Fig. 349). Of the latter kind the bowl is ogee-shaped, and the foot in a modified form of the "Ramilie cock." Practically these are insecure, and only those of the usual small capacity of punch-glasses of George II.'s time appear to be original. The modern and larger glasses of this form are cumbersome and unsteady, and quite devoid of artistic merit. Other glasses, both white and green, are met with in the shape of a low-crowned hat proper, but they are, like the cocked bowls of glasses, mere fantasies, impracticable for drinking purposes, and belong to the early years of the current century.

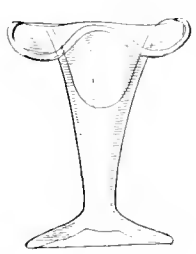


Fig. 349. (One third.)

[1] *The Four Georges*, p. 68, Pocket Edit. n.d. In Junius's famous Letter to the King, he says in a *footnote* that the inclusion of the Earl of Bute in the household of the young King "was the salient point, from which all the mischiefs and disgraces of the present reign took life and motion."—*The Letters of Junius*, ut sup. p. 173.

GLASSES, MORTARS, SALT-CELLARS, CANDLESTICKS, GIRANDOLES (XVI.)

With the present lack of information as to the appearance of mortar glass such as Mansel made for 1s. 4d. a dozen,[1] it is possible that the small circular cups, fluted or plain, and with folded edges, and now answering the purpose of salt-cellars, may have been originally made as mortars. With some reservation, therefore, an illustration is given from a set of four in the author's collection (Fig. 350). The quality of the metal, striations, and irregularities suggest the early part of the eighteenth century. The cup of tazza-form, 2¼ inches high, about 1750, whatever its use, is of very rare occurrence (Fig. 351).

Mortars were also made of silver. Sir Thomas Herbert has recorded that, on the night preceding his execution, Charles I. had in his chamber "a great Cake of Wax set in a Silver Bason that then as at all other times burned all

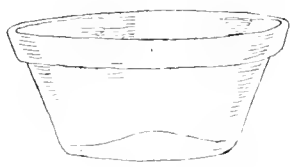


FIG. 350. (One half.)

FIG. 351. (One half.)

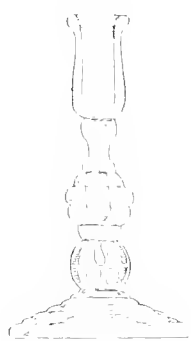


FIG. 352. (One third.)

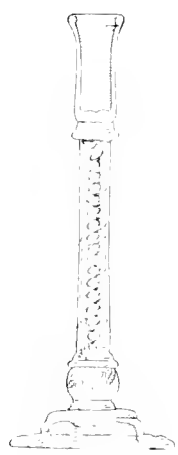


FIG. 353. (One third.)

Night." This was the King's Mortar, and it may be remembered that on rising by its light, two hours before the day, on the morning of 30th January 1649, he appointed what clothes he would wear. "Let me have," he said, "a Shirt on more than ordinary, by reason the season is so sharp as probably may make me shake, which some Observers will imagine proceeds from fear. I would have no such Imputation. I fear not Death! Death is not terrible to me. I bless my God I am prepar'd."[2] Did ever glass mortar help to light so pathetic a scene!

Late salt-cellars of the oval or lozenge form were cast in wooden moulds like the Bohemian glasses, and afterwards cut and polished on the wheel.[3]

[1] See Appendix, Original Documents, No. XXIII.

[2] *Memoirs of the Two Last Years*, etc., *ut sup.* pp. 183, 184, edit. 1813.

[3] Small oval "cellars," cast, and cut on the wheel, of the lovely sapphire-blue glass made in Prague are in common use in Bohemia and Hungary for the crimson *Paprica*.

To the last quarter of the eighteenth century belong also those with florid painted panels—"églomisés"—inserted in the bottoms. Quite at the end of the century come the deeply-cut rectangular salt-cellars standing in trays, and again following the form of the excellent square silver salt-cellars of the time. They are capital examples, if unchipped, of English flint glass at the height of its perfection—the finest glass in the world.

Having spoken of early glass candlesticks,[1] showing the same treatment as the stems of the wine-glasses (Figs. 352, 353), we may mention the cut-glass chandeliers and girandoles, heavy with chains of prisms, etc., of great brilliancy, and the tall cut-glass candlesticks, full of "fire" and "colour," which were produced here, chiefly in the last quarter of the eighteenth century. Again, the details of the standards and arms exhibit the same treatment of cutting as the stems of the wine-glasses. Mr. C. D. E. Fortnum has a beautiful pair of such girandoles; another pair with heavy square feet and pyramidal standards and finials was long in the possession of the author's family, and a tall cut candlestick in his own hands, with a knopped stem, cannot be surpassed for "colour" and brilliancy. The immense superiority in our own day in these respects of English over Bohemian glass was fully shown in a trial before the Lord Chief-Justice, 14th January 1895, concerning a "glass lustre curtain" in a London theatre.

[1] Page 296.

THE JACOBITE GLASSES.

CHAPTER XXIV.

STUART RELICS—THE REBELLION OF 1715—OLD PRETENDER GLASSES—THE PLOT OF 1723—THE REBELLION OF 1745—YOUNG PRETENDER GLASSES—THEIR CLASSIFICATION—PORTRAIT GLASSES—MOTTOED GLASSES—THE CYCLE CLUB—CYCLE GLASSES—DIRECT AND DISTORTED PORTRAITS OF THE YOUNG PRETENDER—GLASSES OF A GLOUCESTERSHIRE JACOBITE CLUB—VARIETIES OF JACOBITE GLASSES—SOURCES OF MANUFACTURE.

NOTHING in history is more striking—many think that, considering their peculiar temperaments, nothing is more inexplicable—than the fascination exercised by the Stuarts, and the affection lavished on them. So enduring and continuous was the spell which was cast that there is scarcely a cabinet in the kingdom that does not enshrine a memorial of one of the hapless royal line, pursued by a relentless fate, which came to an end eighty-nine years ago, amidst the wealth of song and story which its chivalry or misfortunes evoked.[1]

For during more than three centuries an extraordinary number of Stuart relics has been continuously cherished and amassed—personal ornaments, religious emblems, portraits, scraps of needlework, watches, miniatures, memorial rings, lockets, badges, enamels, medalets, glasses, snuff-boxes, locks of hair, ribbons, garters, and fragments of plaid.

That memorials of Mary Queen of Scots and of Charles I. should have been piously treasured beyond all other objects of the same character, one can easily realise. But what about the relics of the two sons of the White King, and of the hero of the expedition which seemed for the moment so bright in

[1] Si quelque chose justifie ceux qui croient une fatalité à laquelle rien ne peut se soustraire, c'est cette suite continuelle de malheurs qui a persécuté la maison de Stuart pendant plus de trois cents années.—Voltaire, *Siècle de Louis XIV.*, chap. xvi. p. 174, Edit. 1858.

October 1715, and so soon and so discreditably collapsed? Has not the veneration for trifling mementoes of "Bonnie Prince Charlie" been chiefly based, and not in Scotland alone, upon the charm of a gracious personality, and upon a belief, not quite justified by events, in his inherited virtue of the spirit of a Stuart; together with a common compassion for unexampled misfortunes and a dismal end? The cause of which Charles James Edward was the champion in "the '45" dwindled, indeed, into little more than a sentiment shortly after the death of George II., and was nothing but a shadowy legend when the Young Pretender passed away in 1788, a very different man from the idolised "Prince Charlie" of "the '45." Yet, at the present day, a century later, his memorials are more valued than ever.[1]

Perhaps the most remarkable feature of the countless Stuart relics, dating, as they do, from the youth of Mary Queen of Scots to the old age and death of Henry, Cardinal of York, in 1807, is their generally well-recorded authenticity; and this appears to be the case no less with regard to such precious items as the pearl earring of Charles I., his hair in ring or locket, than to the treasured frayed and florid morsels of Prince Charlie's plaid. Such authenticity may also be readily anticipated for the Jacobite drinking-glasses—relics, indeed, rather of "The Cause" than of the men—because of the secrecy which hedged in their use, and the care which was consequently taken of them in the times when Jacobites and their ways, to say the least, caused uneasiness, if they were not viewed with apprehension by the Government.

In the rebellion of 1715, when the standard of the Old Pretender, the Chevalier of St. George, was raised by the Earl of Mar, the Jacobite cause seemed at first a hopeful one. The story has many a time been told—of the rising in the North; the unlooked-for apathy and lack of union in the five counties; the disaffection in the West of England; the capture of Perth; the hesitation of Mar, with his immensely superior force; the landing of the Pretender; the divisions in his council; the jealousies between the Scotch and English leaders; the loyalty of Argyle; the surrender of "proud Preston;" the capture of noble rebels;[2] and

[1] The author saw many tears shed at the sight of mementoes of Mary Queen of Scots, and of Prince Charlie, as late as in 1889 at the Stuart Exhibition!

[2] It appears that the prisoners were kept with a certain degree of laxity which is surprising, considering the gravity of their offence—High Treason, and the terrible punishment for "Levying war against the King in his realm," dating from the *Statute of Treason* of 25 Edw. III. (1351). In a letter of 17th August 1716, already alluded to (Introductory Notices, p. 59), the writer says: "Every day almost, one or other of the condemn'd State Prisoners makes his Escape out of Gaol: by Connivance ('tis thought) that we may have no more last Speeches. My L[d] of Oxford however continues still in the Tower: and setts apart two houres every day of his Life to laugh at those

the sudden and ignominious collapse of the enterprise for craven fear of the Dutch troops, when the Pretender, with the crown seemingly within his grasp, departed to a cold welcome in France. He went away by the postern in Dundee, just as his unworthy ancestor, Edward II., son of the Great Plantagenet, retreated from the Castle of Caerphilly in 1326, and from the forces which his queen and his son had brought against him. Thus did a Stuart in 1715, in whom signs of spirit had certainly not been wanting at Malplaquet, 11th September 1709. All this has been narrated in a hundred histories, and need only be referred to here to localise historically the glasses now to be spoken of.

Less familiar is the highly interesting and complex Jacobite attempt of 1719, in which the Duke of Ormond, the Earl Marischal, and no less a personage than Charles XII. were to be the leaders. The death of the latter, 12th December 1718, by a roving and auspicious bullet, and a timely storm, averted the danger. But Scotland was actually invaded by a small Spanish force, and an engagement took place in Glenshiel.[1]

Six glasses only which may be directly associated with the Old Pretender have fallen under the cognisance of the author, and they have particular interest from bearing the cypher, I R[2] crowned, of James Francis Edward, proclaimed at Saint Germain "James III., King of England, Scotland, France, and Ireland," immediately on the death of James II., 16th September 1701. In addition, the glasses all bear verses of a Jacobite song, loyal expressions, toasts, and dedications, some added later, and all engraved with the diamond point.

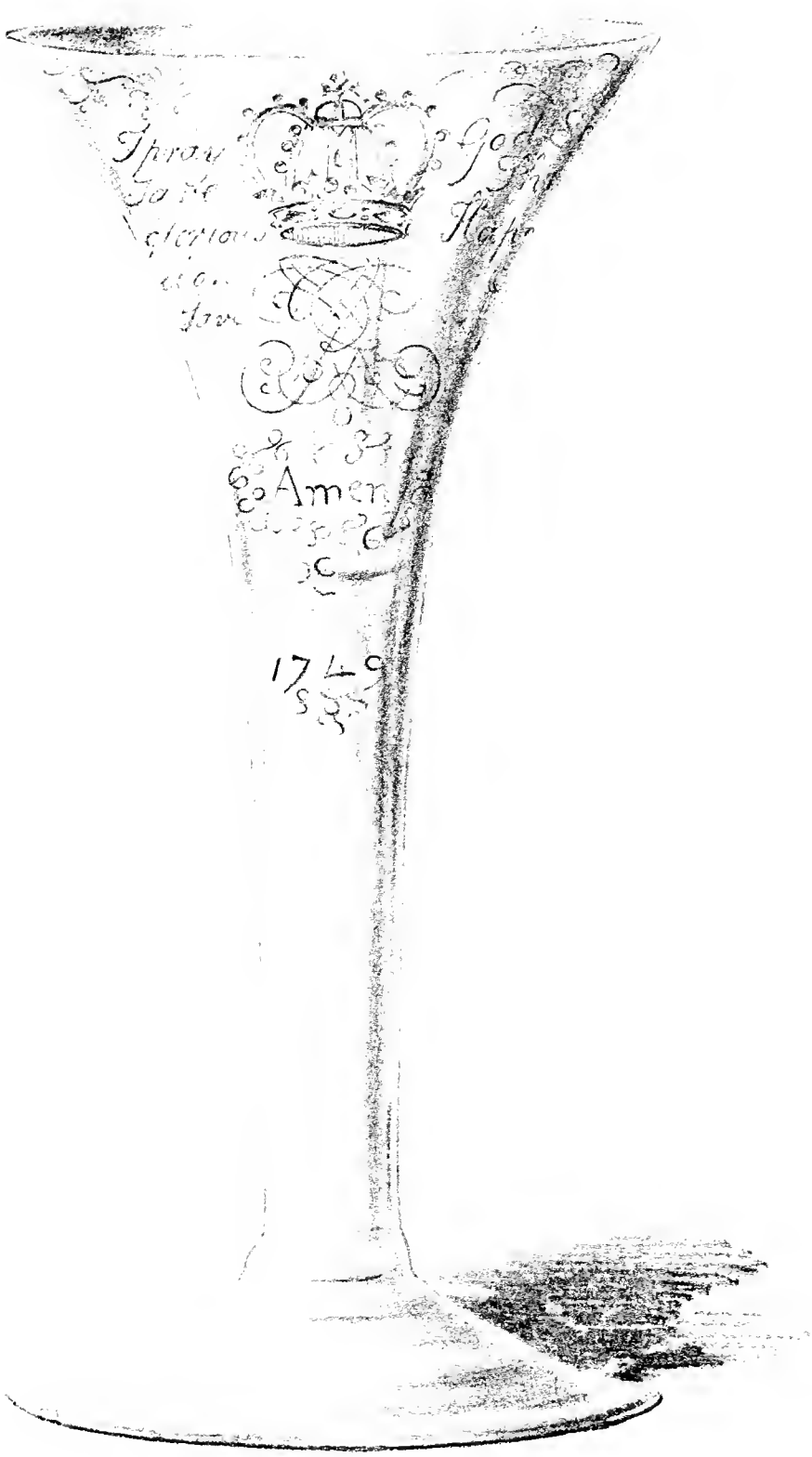
A peculiar feature of the Old Pretender glasses is that the verses of the song inscribed on them are part of a Jacobite paraphrase of the original ballad beginning "God save great James our King," which was composed by Bull at the time of the Powder Plot. This, according to Clark, in his *Account of the National Anthem*, was adapted in 1745 by Arne, the author of "Rule Britannia," for the Georgian National Anthem, and set to music as we now have it in "God Save the Queen."

Peaple, who wou'd have his head, for doing those very things which They themselves are Acting in a more bungling mañer. Two hours a-day, I find I must also sett apart to Consider how I shall deserve the Favours you heap upon us. But alass two hours will never do! I defy the man who has once seen the charming Mrs. Chauncy, to think of any thing else, all the day long."—R. Graham to the beautiful Mrs. Chauncy, *Original Correspondence*, 1633-1828, *ut sup.* vol. xxvii. p. 92, in the possession of Albert Hartshorne.

Only two peers suffered, Lords Kenmure and Derwentwater. Has not the application of the rents of the Dilston estates long since effaced the treason?

[1] *The Jacobite Attempt of* 1715, Scottish History Society, 1896, edit. W. Kirk Dickson.

[2] By a light artifice of the engraver in all the examples of this cypher, which is French in style, the loops of the two R's are so arranged that it might conveniently pass as that of Georgius Rex.



56.—ENGLISH GLASS—JACOBITE.

I. A plain, drawn glass, 8½ inches high, in the possession of Colonel Mesham, offers a good example of those in question, because it exhibits four verses of the song inscribed as follows upon the bowl :—

God Save the King I pray, God Bless the King I pray
God Save the King
Send him Victorious, Happy and Glorious
Soon to reign over us
God Save the King

God Bliss[1] *the* PRINCE OF WALES
The True-born Prince of Wales
Sent us by THEE
Grant us one Favour more
The King for to Restore
As Thou hast done before
THE FAMILIE

God save the Church I pray
And bliss the Church I pray
Pure to remain
Against all Herefsie
And Whigs Hypocrifsie
Who strive malicioufslie
Her to defame

God Bliss the Subjects all
And save both great and small
In every Station
That will bring home the King
Who hath best right to reign
It is the only thing
Can save the Nation.

The verses are surrounded with scroll-like borders (Plate 56). On one side of the glass is the crowned cypher formed by the letters I R, direct and reversed, below it AMEN, and further down, on the stem, 1749, probably the date when the dedication on the opposite side of the glass was added—

To his Royal Higness
PRINCE HENRY
Duke of
Albany & York.

II. A similar glass, 6¾ inches high, is in the possession of Mr. Stewart Marischal Keith-Douglas. On the bowl is engraved the first two verses of the

[1] In all the glasses with the verses of the song "bless" is generally spelt *bliss*, showing that they were engraved by the same artist, probably a Frenchman. The history of the National Anthem is fully discussed by R. Clark in *An Account*, etc., Edit. 1822.

song, and on the foot the third verse. The foot has been broken and mended in three pieces with a silver collar, seams, and a circular comprising band. Two of the parts have been supplied from another and a thinner foot. One of these, instead of the fourth verse, contains the following short version of it :—

God bless
all
Loyal Subjects ;

and on the bowl is also engraved the crowned cypher as before, and the same dedication. This glass has descended to the present owner from his ancestor Bishop Keith, Primate of Scotland, who received it from his relative George, tenth Earl Marischal.[1]

III. In the collection of M. V.-J. Vaillant at Boulogne is a glass of the same shape as those just mentioned, but with an air-twisted stem, and 6½ inches high, bearing the same two first verses of the song, the crowned cypher, and AMEN as before, and the following dedication :—

To His
Royal Highneſs
The Duke
And To
The Increase
of The
Royal Family.

In two lines round the foot is—

A Bumper &c. To The Noble and True Patriot of his Country The Right Hon^le George Earle Marshal etc. etc. Hereditary Earl Marshal of Scotland.

M. Vaillant has shown that the glass belonged to Ann, daughter of Richard Harcourt and his wife Henrietta, daughter of Henry Browne, Viscount Montagu of Cowdray. Her parents had followed the fortunes of the Stuarts into France ;

[1] This genial and eccentric Jacobite was a devoted adherent of the Old Pretender, and received him at his house at Newburgh, 22nd December 1715, and was attainted accordingly. After French protection had been withdrawn from his master he retired to Prussia and took service with the King. He enjoyed the confidence of Frederic the Great, and was ambassador to France in 1751, and to Spain in 1759. He was pardoned by George II. in the last-named year, and died in 1778. His dignity of Hereditary Earl Marshal of Scotland had been forfeited to the Crown sixty-two years before. It was one of the Scottish hereditary jurisdictions reserved in the Act of Union of 1707. By the terms of the Peace of Utrecht, 1713, Louis XIV. recognised the Elector of Hanover as successor to Queen Anne, and engaged to withdraw his protection from the Pretender, and to send him out of France.—See Koch, *Traités de Paix*, tome i. p. 200, Art 7. In 1716 George I. formed an alliance with France and the States, the chief object of which was to crush the Jacobite cause. The Pretender was therefore driven from France, and he retired to Italy. He was the last of the Stuarts who received royal honours.

she died "le 15 Ventose, An VIII.," *i.e.* 2nd March 1800. Her effects were sold by auction, and the glass has remained in Boulogne up to the present day.[1]

IV. In Clark's *Account of the National Anthem*, mention is made, and an inaccurate engraving given, of a glass at Fingask Castle, Aberdeen. This still exists there, together with a large number of Stuart relics of great interest in the possession of Mr. W. Murray Threipland. It is a drawn glass, with an air-twisted stem, and differs in character from those already spoken of, in having a beaded bulb at the base, a form alluded to as of some rarity at p. 262. This glass also has on the bowl the two first verses of the song, and the crowned cypher with *AMEN* under it.

V. Mr. G. E. Attwood has a glass of the drawn shape, $7\frac{3}{4}$ inches high, engraved with the two first verses of the song as before, and the same crowned cypher. To this glass a legend is attached to the effect that it was given by the Young Pretender to a Bond Street silversmith named Collier, in the middle of the last century, in acknowledgment of his entertainment of him.[2]

VI. In the National Museum of Antiquities at Edinburgh is a shouldered glass of soft white metal, 5 inches high, and probably of French make. On the bowl is engraved two verses of the song; at the end of the first is "1716 AMEN," and at the end of the second 1745. The glass is further decorated, like the others, with scratchy, straggling scrolls of no artistic character. It was bought at Haddington in 1876.

Generally as to these glasses, there seems no reason to doubt that they were all made and decorated with the crowned cypher, and the verses of the song, as memorials of the Old Pretender's attempt in 1715, and of the endeavour made on his behalf four years later; and to commemorate the birth of the Young Pretender—"the true-born Prince of Wales," 31st December 1721. It is probable that they were engraved in France and introduced here in 1722 for distribution among the adherents of the Stuarts.[3] The style of the glasses shows them to be

[1] V.-J. Vaillant, *Notes Boulonnaises, Variétés*, etc., p. 51 (1889).

[2] It has been fairly established that the Young Pretender was rash enough to be in London in 1750, 1752, and 1754, and there is an improbable legend that he actually witnessed the coronation of George III. in 1761.

[3] In 1711 the Duchess of Gordon sent to the Faculty of Advocates a silver medal of the Chevalier of St. George, with the legend REDDITE on the reverse. Its acceptance by Dundas of Arniston caused the dismissal of Dalrymple, Lord Advocate. The medal is by Norbut Roettier, and was struck in 1708 for distribution among the partisans of the Prince. The actual offending medal, or a copy of it, is now in the National Museum of Antiquities at Edinburgh. It is described in *Medallic Illustrations*, etc. (by Hawkins, Franks, and Grueber), vol. ii. pp. 312, 313. It is engraved in Cochran-Patrick's *Catalogue of the Medals of Scotland*, Pl. XI.; and in *Van Loon*, vol. v. p. 48. There are three other varieties of the medal.

of this time. The positions of some of the dedications, and the later dates indicate that these were added afterwards. A tall drawn glass in the possession of the Dowager Lady Williams Wynn is engraved with an open natural rose, and single bud on a stem growing out of the ground; round the rim is inscribed GOD BLESS THE PRINCE. This seems to be an English glass in honour of the Old Pretender, and must be an early Cycle relic (Plate 57).

In the British Museum is a glass of the ogee shape, of larger size than usual, with an opaque-twisted stem, and showing on the bowl a full-faced bust within wreaths of flowers, and the motto COGNOSCUNT ME MEI below. On the other side is PREMIUM VIRTUTIS under a royal crown and within a wreath, the whole thinly engraved on the wheel. This is another glass in praise of the Old Pretender, dating about ten years before his death in 1766.

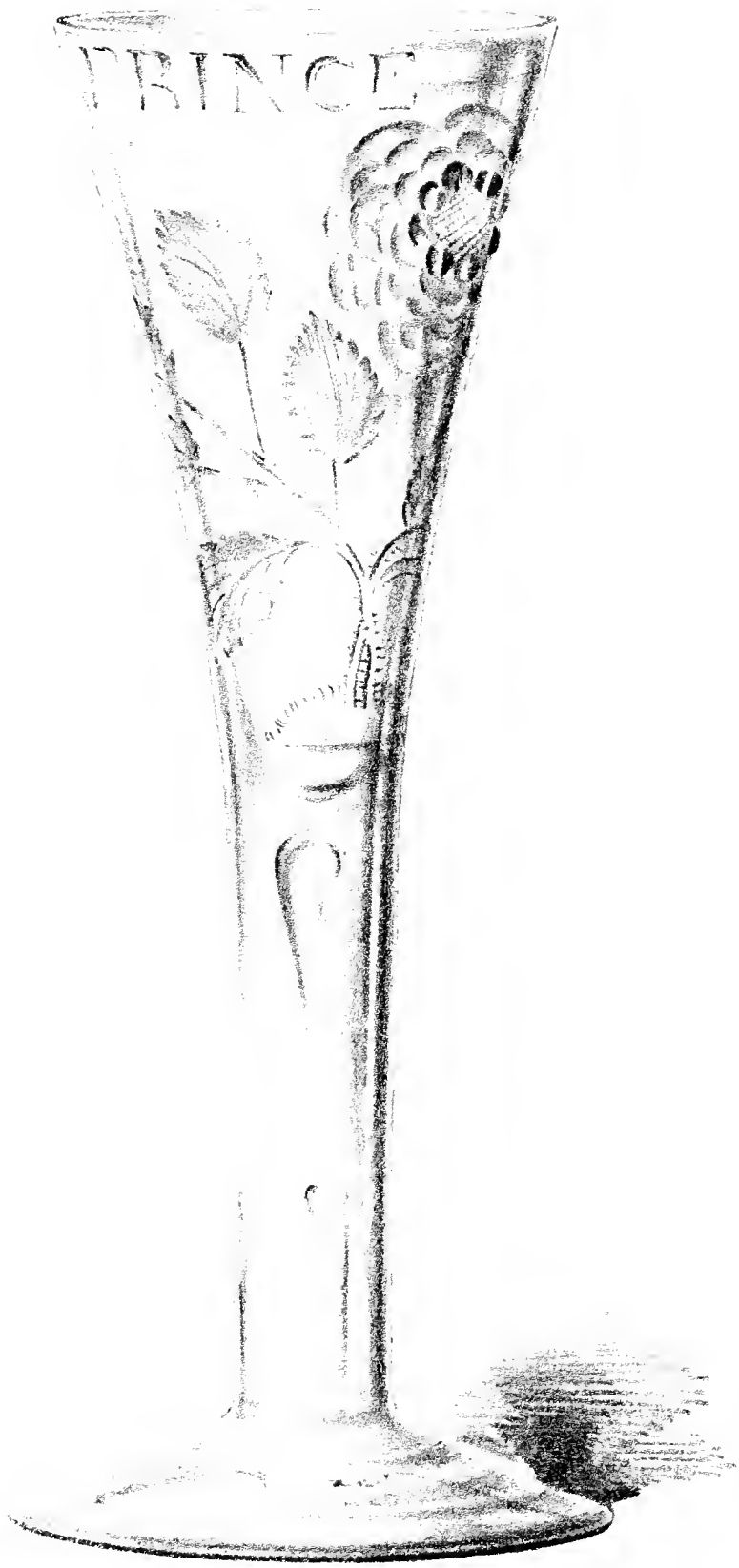
In spite of the failure of the enterprise of 1715, which so strengthened the House of Hanover, and the harsh measures dealt out to the rebels, white cockades and white roses were by no means laid aside,[1] and drinking the health of "The King over the Water," and "The Cause," became a pleasant and popular method of secretly keeping the sentiment alive and helping it forward. The unharassed Whigs used much the same convivial ways, and naturally more successfully, having the supreme advantage of a king *in esse* on the right side of the Channel.

The unsparing treatment of the prisoners of 1715 was, at least for a time, deterrent, and the executions at Lancaster, and on Tower Hill, and the deportations to the Plantations of North America were not encouraging for the public display of treason, and the incriminating evidence of labelled Jacobite wine-glasses. But rebel clubs had been secretly formed since the beginning of the century, and held their covert meetings, of which the glasses are now almost the only record; and

[1] "My father was yesterday at Court wth the rest of the B^ps^ there was a very numerous & splendid appearance. I drank the King's health at a Tavern with Matt Kenrick, & two or three more. I rejoice to hear Norf^k^ & Norw^h^ are become so Loyal & wish all the other Countys in Engl^d^ so too. . . . Oak boughs and white Roses begin to appear today, but I believe will be suppress'd in great measure."—William, son of Samuel Bradford, Bishop of Carlisle, to Samuel Kerrich, Fellow of Bene't College, Cambridge, 29th May 1718—*Original Correspondence*, 1633-1828, *ut sup.* vol. xi. p. 125, in the possession of Albert Hartshorne.

Roses and boughs were suppressed indeed, for imprisonments, fines, and scourgings were meted out to the contumacious, and the guards were set to watch the streets in 1715 and prevent the people from wearing these signs of misdirected loyalty. Two soldiers were flogged nearly to death in Hyde Park, in 1717, for wearing oak boughs in their hats on 29th May. The white cockade belongs to "the '45," and did not appear here until after 1736. It is a badge of France and not a Stuart emblem.

In 1754 a riot was caused in Exeter on account of the sign of the Poltimore Inn being decorated on 10th June with white roses. The sign-post being pulled down by some soldiers, great tumult ensued and many rioters were imprisoned. About the same time several stiff-necked and seditious inhabitants were taken into custody for wearing white roses.—A. Jenkins, *History and Description of Exeter*, p. 207, edit. 1806.



57.—ENGLISH GLASS—JACOBITE.

while the Stuart Pretender was denounced by Proclamations in England, the "Pretender" from Hanover was defied from the safe haven of Saint Germain.[1]

The intriguing of Atterbury, Bishop of Rochester, with the Pretender, in the Plot of 1723, is as undeniable as the deprivation and exile which expiated it.[2] Hot-headed Tories in countless places—less resolute than "F. Roffen," less

[1] A manifesto of "James III.," dated Plombières, 29th August 1714, "in ye 13th year of our Reign," protests against the usurpation of the Crown by the Elector of Brunswick, "one of the remotest Pretenders to our crowns."

[2] *March* 2, 1722-3.

DEAR SAM,

I have been condemning myselfe for more Posts than one, that I have not had ye civility to write to you since I left Cambridge, & I was resolv'd to undergoe that uneasiness no longer; & I was ye more willing to make use of this opportunity, because I have just learnt a Particular or two concerning ye famous report frõ a member of ye House wch perhaps may be a little new to you. The Report was read in ye H. yesterday by Mr. Poulteney ye Chairman of ye Committee, it was six or seven hours long; There are in it a great number of Letters wch give great light into ye Plot & it seems particularly (to) affect the L——d N——th & ye Bp of R——r. It appears that ye L——d N——th was unwilling to engage in it, for he was to be General, without Foreign Assistance, & would upon no account attempt the thing, till ye Army was broke up, for ye Plot was carried on after ye Discovery; It appears that arms were provided for 1200 men & pt of thẽ lodgd in a lighter, cover'd wth coals in Fleet-Ditch; it appears that men were sent frõ Rome to keep up ye Spirit of ye Mob, at the two elections of W——r & Cov——y, & it is much suspected, but his name among some others cannot be deciphered, that A——d H——inson was concern'd in it; it is certain that ye B——p acted with great caution for he never discoursed ye matter befor *two* People; since his commitment he has carried on a correspondence wth some of his Friends & Letters have been intercepted frõ him, one conceal'd in a pound of Butter to some mem——rs of ye H. in wch he assigns thẽ their particular p^t^ of his Defense when the Report was to be made. This day the Report was read a 2^d^ time, & order'd to be printed, & deferr'd ye further consideration of it, till Thursday next upon a Division 159 to 90. There is a dangerous club held in ye City at Trueby's of wch many disaffected Lds & Commons are members called y^e^ *Beaufort* Club; Ld Orrery was s^d^ to be ye President. Remember me very kindly to Mrs. Newton &c. tell her that I did her errand to Jerome Knapp.

Frõ Dear Sam
y^r^ very affectionate Friend
C. I.

"It is s^d^ all ye Instructions about ye Plot were given frõ ye Beaufort Club of wch a ~~late~~ noble person of ye first consideration at ye trial of ye Rebel L^ds^ was a member." — Thomas Herring (Bishop of Bangor, 1738; Archbishop of York, 1743; of Canterbury, 1747-1757) to Samuel Kerrich—*Original Correspondence*, 1633-1828, *ut sup.* vol. xii. p. 68, in the possession of Albert Hartshorne.

It was safer in those times not to sign letters. The following account of the passing of the Bill of Pains and Penalties against Atterbury, from the pen of the future Primate—"The Red Herring"—may be conveniently added here.

May 16, 1723.

DEAR SAM,

If I had more time or better information, you should have more & better Intelligence; Yesterday ye grand Bill was pass'd in ye H. of Lords, & to morrow the King comes to ye House to confirm it; The Bp. designs to go immediately to Lisbon, & ye King provides a Yatcht to transport him; The reason of his fixing upon that Place is because his son has many Friends there; The Principal Speakers in his favour were D. of Wharton, Ld Cowper, Ld Trevor, Ld Gower, Ld Strafford, & Bp. Gastrel (Chester), Ag^st^ him D. of Argyle, Ld Lechmere, Bps of London & Salisbury, Ld Peterborough; None of his Friends seem'd to deny his Guilt, but some use'd the Inssufficiency of ye Troop, & others that there was no necessity to proceed in so severe a method. Bp. Gastrel insisted upon ye irregularity of proceeding ag^st^ him, without his being first degraded by Ap. To wch Salisbury replied, that they did not deprive him of his internal Character, but ye Exercise of it in these Kingdoms, upon wch Ld Lech——re observed, *that* Bp. had advanc'd a very strange notion for he knew no more to be in a Bp. but what ye Laws of ye Land gave him. The most remarkable Thing was an illnatur'd reflection of ye Ld Strafford upon the Bench of Bps. He s'd he did not know, but their enmity toward ye Bp. of R——r might proceed frõ ye Tartars Notion, who believe that if they can deprive any great man of Life all his excellencies will be deriv'd into themselves; To wch Argyle replied, that if that was applicable in the present case, & ye Bps. who remain should partake of all his Qualities, he would either be for keeping him here to avert such an effect, or for abolishing ye whole Order of Bps. if it was so tainted. Bp. of Carlisle was not present, you know the Reason, ArchBp. of Cant: has—had a Cold a long time. I don't know whether you understand my Story, I have not time to clear it, & my information came very late, I would not have writ, but that I was

cautious than the mysterious *Loyal Brotherhood* at Badminton,[1] and the members of *The Cycle* and its branches—took open and violent steps to procure the drinking of the health of James III.; and, as local reprisals, the Government directed the enforcement of the laws against Papists, and the summary suppression of assemblies.[2] But the country, besides being privily tinged with Jacobitism from end to end, was teeming with waverers—waiting, in fact, to see how things went, and whether treason would prosper—while the low ribaldry of the Calves' Head Club was openly permitted.[3]

willing to gratify & to take this opportunity of professing myself

Dear Sr
Affectionately yours
T. HERRING
Service to ye Ladies.

The same to the same.—*Orig. Cor.*, ut sup. vol. xii. p. 74.

See also T. Stackhouse, *Life of Atterbury*, from his Birth to his Banishment, dedicated to William Pulteney, 2nd Edit., 1727.

[1] There are at Badminton several old portraits of gentlemen supposed to represent members of a Jacobite club, but their names do not appear upon the pictures, nor is there any record of them. The Dukes of Beaufort were always loyal to the House of Stuart and the old Tory interest; the second and third Dukes never went to court, and are the only heads of the family who, since the time of Elizabeth, did not have the Order of the Garter. A letter exists at Wroxton addressed to William, Lord North (1673-1734), by Henry, second Duke of Beaufort (1684-1714), as follows:—

Dear Brother North, — The Brotherhood having honoured me with their pictures, according to sketches prepared by Mr. Gouge, I hope you will favour me with sittings at a time most convenient for your self, and as Mr. Gouge can have opportunities to draw it. Mr. Sergeant Dewes is my solicitor on this occasion, wherefore I beg your answer and approbation either to him in person or by Letter directed to Jeremy Dewes Esqr, at the Cocoa tree in general, which is his office at present. The great honour the Brotherhood does me on this occasion shall be acknowledged by the Pictures being entailed for after ages upon my ffamily, as memorials of the Loyal Brotherhood over whom I have the happiness to preside.

This will infinitely oblige,
My dear Lord
your faithful Brother and humble Servant
Beaufort Prest L. B.

From information kindly given by the Duke of Beaufort, it appears that a tradition exists at Badminton to the effect that a spot at Hawkesbury Upton, now occupied by a monument to Lord Edward Somerset, died 1842, was formerly a bowling-green, where the Jacobites held their meetings under the cover of playing bowls. The above letter was communicated to *Notes and Queries*, 5th S., vol. xii. p. 366, by the accomplished antiquary, the late Mr. E. P. Shirley.

[2] For instance, Robert, Lord Walpole, *Custos Rotulorum* for Devon, received a printed letter from the Lords of the Council, dated 24th February 1743, informing him that the eldest son of the Pretender was making preparations to invade England, and was commanded to see that the laws against papists were executed with the utmost diligence, and that assemblies of the people were prevented. These orders were repeated 5th September 1745, and the Mayor was directed to make search for papists, recusants, arms, ammunition, etc. The same printed instructions were sent throughout the kingdom, together with a proclamation offering £30,000 for the person of the Young Pretender, dated 1st August 1745, which produced a foolish counterblast on the part of the Prince for the apprehension of George II.

[3] In contrast with the Loyal Brotherhood and the Cycle was the *Calves' Head Club*. This society was established soon after the death of Charles I., for the purpose of flouting his memory and glorifying the principles of the Commonwealth. The club had no fixed home, but held its meetings on 30th January in several parts of the town as was found convenient. After the Revolution these took place in an almost public manner, for no danger was apprehended. According to an account given by a gentleman who was present out of curiosity at an anniversary in 1713, the proceedings were as follows:—An axe was suspended in the club-room and reverenced as the chief symbol. The bill of fare consisted of a large dish of calves' heads, by which the King and his friends were represented;

The time of the Rebellion of 1745 was therefore favourable to its success. The Highlanders were disaffected, and when the attainted Tullibardine raised the standard of James III. at Glenfinnan, June 1745, the so-called battle of Prestonpans at once made Charles James Edward master of Scotland. He held court at Holyrood for some weeks, and then, with about 6500 men, proceeded south and took Carlisle. A scare ran through England when the march on London was begun.[1] Of the five northern counties Lancashire was now the most defiant, but

a large pike, with a small one in its mouth, emblem of tyranny; a cod's head, representing the King singly; and a boar's head, with an apple in its mouth, indicating him under another aspect. The feast finished, an elder presented an *Icon Basilike*, which was burnt upon the table while "anthems" were sung. Then a copy of Milton's *Defensio Populi Anglicani* was produced, upon which all laid their hands and made oath to maintain the principles contained in it. The members were Independents, like Milton, and Anabaptists. Grace having been said by Jerry White, formerly chaplain to Oliver Cromwell, the scurrilous Anniversary Anthem was sung, in which both church and kings were attacked, and a calf's skull filled with wine passed round; then a brimmer was drunk to the pious memory of the Regicides. In the course of many of the songs the health of *Old Puss*—that is, "the good old cause"—was drunk, also, "the Man in the Mask," meaning the executioner, Oliver Cromwell, "the glorious year 1648," etc.

At a meeting of the club on 30th January 1734, in Suffolk Street, the members exhibited raw calves' heads in bloody cloths at the windows; then they cast a calf's head into a bonfire below which they had caused to be made, and with other drunken vagaries occasioned a great mob to collect, who showed their higher refinement by becoming angry, breaking the windows, and taking steps to pull down the house. A riot ensued, the guards were called in, and the club was thenceforth suppressed. A copper-plate, probably engraved in the Low Countries, was published to commemorate the event, in which the members are shown sitting round a table drinking wine, apparently Canary, out of baluster-stemmed glasses. On the table is a calf's head wrapped round with a white cloth; on the floor are several wickered flasks; and on the wall a picture is shown representing the execution of Charles I., with the King receiving the fatal blow lying prone upon the scaffold—a mere butchery—as his enemies chose to show him, and in direct contradiction to the lines of Andrew Marvel, who must have known exactly what took place—

> He nothing common did, or mean,
> Upon that memorable scene.

The history of this infamous and vulgar society is set forth in "The Whigs unmask'd: being the Secret History of the Calf's-Head Club," etc., Edit. 1721.

"Calves' Head Day" still lingers as a term of reproach for 30th January in rude districts.

[1] Sir John Clerk of Penicuik, who withdrew to England in "the '45," tells us in his Memoirs that "a most terrible pannick possessed all the people to that degree that many rich people about Newcastle, Durham, and York sent off a great deal of their Effects to Holand and Hamburgh, and all their silver plate, jewels, money, and such like domestick necessaries were hid under ground, so that I had left England and returned to Scotland before these things appeared again. We did the same in Scotland, and I am affraied that many of us lost in that manner what will never be supplied."

Mrs. Osborn, great-niece by marriage of Dorothy, Lady Osborn, in a letter written in December 1745 says: "Wednesday last was the most dismal day I ever knew. . . . By ffryday these fears were over and others succeeded, which seized indeed the whole Town, and was, I must say, a most shamful Panick. . . . The councils sat all night, the army here was forming to march, Lord Stairs was sent to ffinchly to mark out his camp. . . . Thousands of the Pretenders Declarations were thrown about the parks and the streets, every woman thinking where to run for safety, and every man getting arms and horses to go with the King." Bedfordshire was in the direct line from Derby to London, and Mrs. Osborn sent instructions to Chicksands Priory, which lay close to the main road, for the family plate to be buried.—*Political and Social Letters by a Lady of the Eighteenth Century*, 1721-1771, Edit. E. F. D. Osborn.

To so out-of-the-way a place as Dersingham Hall

the feeling of the people proper was distinctly against the business. Preston and Manchester, deeply attached to the old order of things, both religious and political, alone of all English towns rang their bells, and presently Derby was reached.[1] Three armies being opposed to the rebels, English promises having proved delusive, and France making no sign, retreat upon Scotland, though dangerous, now became inevitable, for the Trent lay before the Highlanders, the forces of the Duke of Cumberland in Staffordshire stopped further progress, and Wade was at Doncaster.

the panic rapidly spread. Writing on 10th December 1745 to her sister Elizabeth Postlethwayt at Denton Rectory, Barbara Kerrich says:—"I write to you now in ye greatest confusion, as is all ye countrey hereabouts for yesterday it was report'd y^t^ ye Rebels, wou'd be at Lynn as to morrow, but we had a letter from Dr Pyle just now & he says ye Rebels are at Ashbourn in Derbyshire, The Duke at Coventry, & Marshal Wade at Mansfield, this is ye last advice, however he says we are greatly Alarm'd, The Rebels may some of them straggle hither if thrash'd, or ye French may come, who are making a vast Embarkation, we are arming to defend ourselves, & if we hear they bend this way we shall cut down all our Bridges & lay ships in ye shallower parts to defend us, this is what was in Dr Pyles L^r^. This is a little Respite but God know what is to become of us nor where we can go for to be sure they will be all over ye county if they come here, we have Pack'd up our most valuable things to hide somewhere"—in another letter it is stated that they were buried in the garden of Dersingham Hall—"if they do come, Mrs. Grigson & we meet allmost every day to contrive and comfort one another. I Pray God you may be safe where you are I dont know where to wish you for ye best, & that we may meet again in this World. Tilly that was one of my greatest Pleasures is now my greatest Sorrow when I look upon her, to think what may befall her she never was so well & looks like ye Picture of Health and grow very Tall, pray God preserve her. . . . God grant us a meeting in better times."—*Original Correspondence*, 1633-1828, *ut sup.* vol. vii. p. 142, in the possession of Albert Hartshorne.

In the answer to this letter under the date 26th December 1745, the following occurs:—"I receiv'd your letter with a good deal of concern. I was in fears for you before, for it was report'd here that the Rebles were expect'd at Lynn every day. I wish'd you all here. I thought perhaps you might be safer here as we have but few Houses hereabouts to what you have worth plundring that its possible they may escape us. I should wish to be all together if it shou'd please God to Suffer such a dreadfull thing to happen, but I hope God Almighty will defend and keep us, our apprehension and fears I hope will prove greater than our sufferings."—*Ibid.*, vol. vi. p. 54.

Matilda Postlethwayt, sister of Sir Thomas Gooch, Bishop of Norwich, writing from Benacre Hall to the same, 14th January 1746, says: "This brings the wishes of many happy years which I hope will prove so tho' at present the Prospect be dark, and I must think the coming time is to be dreaded, & can only depend on Providence for security. . . . We have had many alarms of the French coming on this coast, my Nephew wrote me word if they did I must take the Chariot & come up to London. I told him he might as well bid me go fight the Rebels, for I was almost as capable of one as t'other; no, I was resolved to stand my ground tho' I did believe the hurry & fright wou'd demolish me, & so it wou'd if I remov'd, for I grow weaker and weaker going on in my old way."—*Ibid.*, vol. v. p. 203.

[1] In a broadside printed at Derby by J. Drewry we are told that the rebels had marched from Leek and stayed in Derby from 4th December to 6th December; that they drank great quantities of beer, ale, wine, and drams; that they were very dirty in their persons, and savage in demeanour; and that most of them "talked a language called Earsh or Wild Irish." The Prince, the Duke of Perth, and others, and a large body of men came into Derby on the evening of 4th December, having halted on their way thither at Radbourne Hall, 4 miles off, the seat of the ancient family of Pole. In this beautiful house is still preserved a portrait of the Young Pretender, always spoken of until quite modern days as "the gentleman in red"; a portrait of the Duke of Perth, and of his piper, and several glasses engraved with the Prince of Wales's Feathers and REDEAT. There is also a bust in bas-relief of the Young Pretender over a doorway in the great saloon.

London, ever firm for the Protestant succession, was arming, and a camp was formed at Finchley, immortalised by the pencil of Hogarth. But the rebels, in their headlong retreat, were two days in advance when the duke began his pursuit of them.[1] By the way that they came, by the same they returned; the skirmish on Clifton Moor, near Penrith, 8th December, was the last engagement ever fought in England; the Esk was crossed by the Scottish army on 20th December, the battle of Falkirk was the Young Pretender's last victory, 17th January 1746, the raising of the siege of Stirling took place 31st January, and desultory warfare ensued. The fateful day of Culloden arrived, 16th April. At the sight of the repulsed and flying Highlanders, the Prince's courage failed him, and, pale and bewildered, he galloped in hot haste to Lord Lovat's. According to the heroic account he was prevented from rallying his forces and heading a desperate charge by General Sullivan, who seized his horse by the bridle. So, indeed, Lord Carnwath turned his gallant sovereign's charger out of the press, and dissuaded Charles I. from a hopeless rush at Naseby, exactly a century before. But the King had the true spirit of a Stuart, and the nobler points in his character were ever brought out under the pressure of adversity. The brave Lord Elcho, who made a passionate appeal to Prince Charles Edward's courage, has left a very different picture of his conduct at the crisis of his fortunes.[2] Then came the inhuman retribution, known in earlier times in Scotland as "letters of fire and sword"—dreadful beyond the power of words to exaggerate, and the dreary five months' wandering, often, truly, "in deserts, and in mountains, and in dens and caves of the earth"—too wretched

[1] Ashbourne was the Prince's first halting-place on his retreat. He stayed at Ashbourne Hall, where bedroom doors were written in white with the names of the Prince, the Duke of Perth, the Marquess of Tullibardine, who died in the Tower in 1746, Lord Elcho, and others. The door marked for "Sir Tamas Cheridon," the Prince's tutor, and one of the Council at Derby which unanimously advised retreat, now alone remains, carefully preserved *in situ* by Mrs. Frank, the owner of this historic house. The other doors were alienated many years ago by a temporary possessor, a speculating attorney, trafficking in relics of the past. A legend still darkly exists that a Highlander who had strayed away from Ashbourne into the Peak was caught, killed, and flayed.

In the possession of the author is a cotemporary statuette of the Duke of Cumberland, a family relic, $9\frac{1}{4}$ inches high. The face is well modelled in wax, the hair powdered and tied behind with a black bow, and set in a pig-tail. The coat is of scarlet cloth, lined with thin buff leather, faced and cuffed with green, and edged with gold lace. The waistcoat is of yellow silk, with deep gold edging; the breeches of black velvet, over which white hose are drawn; the shoes black, with high heels and low quarters, and the black cocked hat gold-laced and tied up in front to the crown with the black Hanover cockade. The Duke wears the Ribbon, Star, and Garter, and a black sword with a gold-wired grip. It is a military dress, but it cannot be identified as of an English regiment, and is perhaps Hanoverian.

[2] In Bradbourne Church is a wall tablet to the memory of Thomas Buckston, died 1811, aged eighty-seven,—"he was formerly lieutenant in the 30th regiment of foot and was at the battle of Culloden in 1745." To have fought for King George in the last Civil War was long looked upon as a high military distinction.

almost for romance, but illumined by the unparalleled devotion of hundreds of Highlanders of all classes, who scorned the price of £30,000 for the betrayal of their Prince to the Government of the King who reigned, as everybody knows, in virtue of the Settlement of the Succession by several Acts of Parliament, and by reason of the Stuart blood in his veins.

It has been deemed desirable, as in the case of the Old Pretender's expedition, and for the same reasons, to set down here, in as few words as possible, nothing more than the broad facts of the last Civil War in England—"the battles, sieges, fortunes," "action in the tented field." As to the sequel—again the sword of justice fell, not, indeed, tempered with mercy, at Carlisle, Liverpool, Warrington, Preston; but while there is, happily, no demand to dilate upon the shocking barbarities in the Border City—in exact accordance with the ancient Statute of Treason of four centuries before[1]—we may recall the nobility of the Lords who met their fate like Scottish gentlemen on Tower Hill, and whose heads blackened long after on Temple Bar, according to the shameful practice of the time.[2] We may justly respect the men who risked and lost their fortunes and their lives in what they believed to be a right cause; but as for the modern enthusiasts, with neither at stake, and who fancy themselves traditional legitimists, one can have nothing at all to say in this relation.

Thus the Rebellion was crushed. Not so the sentiment. Driven, like his father, from France a few years later, the Young Pretender continued, at first with some justification, to cherish hopes of the crown until, his claims being at last no longer supported by any foreign power, he sank into a habit of life in strange and melancholy contrast with the activity and brightness of his youth.[3] Fortunately, again, we are not required to dwell upon this tragic theme.

[1] *Hanging in Chains*, ut sup. p. 21.

[2] See "Account of the Behaviour," etc., *Tract*, by T. Forde, a gentleman then present, 1746.

"I remember once," said Dr. Johnson, "being with Goldsmith in Westminster Abbey. While we surveyed Poets' Corner, I said to him—

"Forsitan et nostrum nomen miscebitur istis.

"When we got to Temple Bar he stopped me, pointed to the heads of the Jacobities upon it, and slily whispered me—

"Forsitan et vestrum nomen miscebitur istis."

[3] "You'l judge, from this writing, that my *hand* has been disabled. I am recovering from such a Fit of the Gout as I am taught to call a tolerable one. The Old Pretender, after whom you ask, lives at Rome, in a sullen poverty. His son strip'd him of every penny he was worth in 1745 (wch was said to be 100,000 pounds) for the expedition to Scotland, to wch the old man was totally averse, but the young one over-ruled him. The young one lives a strolling mean life, going from Convent to Convent, & living with the Abbot & Monks. He's looked upon as some thing betwixt a fool & a madman. The Father & the two sons hate each other."—Edmund Pyle, D.D., Chelsea, Canon of Winchester, and Chaplain to George II. and George III.; to Samuel Kerrich, D.D., Dersingham Hall, Vicar of Dersingham, Rector of Wolferton, and of West Newton, 28th January 1761.—*Original Correspondence*, 1633-1828, *ut sup.* vol. xiv. p. 157, in the possession of Albert Hartshorne.

It was the remarkable lingering of the ancient cavalier spirit of loyalty which caused so many, with the knowledge of the dire punishments dealt out for participation in "the '45," to persistently cleave to the old order; to brave and bait the authorities for the sake of the picturesque and secret ceremony of drinking the health of a "King over the Water," whose prospects of crossing it "to claim his own again," with the tenacity of a Stuart, became, by the plain force of circumstances, more remote and shadowy every day. But, under the settled Government, and with the reasonable liberty which the Georges let us have, the creditable old feeling of defiance slowly passed through sullen acquiescence to complete acceptance of the new state of things. Naturally there was no sudden and eccentric change of feeling on the part of the Jacobites, but exclusion from the prizes of politics and the Establishment, and from much of the pleasures of social life, became galling and irksome, and many had good reason besides to privily regret that "Bonnie Prince Charlie" had not taken Lord Elcho's advice, and headed a wild rush and gained immortality at Culloden. Thus, as fresh generations grew up, enthusiasm for Charles Edward waned; the old toasts slowly lost their dangerous significance, and while the childless subject of them lapsed lower and deeper, the secret Jacobite clubs—lacking the personal glamour, their romantic loadstar, so essential for the well-being of "a cause"—slowly died, were looked upon at last with good-humoured contempt by the Government, and changed almost imperceptibly into rational and open centres of social enjoyment. Such is the tacit evidence of the *Cycle*.

Probably no other country in the world has so picturesque a chapter in its history as that which treats of the final fortunes of the direct Stuart line which fell under the ban of the Settlement. And if this portion of English history—told though it has been a hundred times—still possesses such peculiar fascination, how much more significance should the engraved and lettered glasses have which played so mysterious and hidden a part in it!

Of these scattered and fast-vanishing relics, and the details of their use, with the exception of certain curious toasts connected with them—which have more or less orally descended[1]—barely anything definite has been recorded;

[1] An alphabetical list, commonly called "Lord Duff's Toast," comprises many of those current among the Jacobites. Lord Mar died in 1742, and the Duke of Ormond in 1745, hence the change in later times in the sentiments referring to these noblemen:—

A. B. C.	A Blessed Change.
D. E. F.	Damm Every Foreigner.
G. H. J.	Gold Help James.
	Get Home Jemmy.
K. L. M.	Keep Lord Mar.
	Keep Loyal Ministers.
N. O. P.	Noble Ormond Preserve.
	No Oppressive Parliaments.
Q. R. S.	Quickly Resolve Stuart.
	Quickly Return Stuart.
	Quell Rebellious Subjects.

no incriminating papers have been left. The glasses associated with the *cultus* of Prince Charles Edward must therefore now, and chiefly through their details, speak in a way for themselves after at least a century of silence. They pass like a scarlet band across the greater part of the series of English glasses of the second and third quarters of the eighteenth century, and it may be premised at the outset that they differ in no respect as to their shape from the varieties which have been described under the Groups Nos. II., III., VII., XIII., etc., the greater number belonging to the air-stemmed glasses of the two earlier series, with only a few isolated examples from others. The interest of the Jacobite glasses lies in the portraits, signs, badges, mottoes, and words upon them.

To what extent the Jacobite clubs ramified into the country at large will never be precisely ascertained, for the whole matter was veiled in obscurity. But the geographical district of general and most emphatic disaffection to the Hanoverian dynasty appears to have comprised the four northern counties, and the whole of Lancashire, as might be expected; the county palatine of Chester—"the Seed-plot of Gentility"; the northern portions of "Proud Salopia," and the parts of Montgomery, Denbigh, and Flint adjoining the borders of the two last-named English counties. As to special Jacobite centres in cities, Preston, of course, and Manchester, Chester, Liverpool, and Shrewsbury, were undoubtedly the most zealous in this part of England, and into the whole of this region, at least, the influence of the Cycle would have extended, and *Fiat* must have been familiar as a household word on numberless tongues, as *The King over the Water* was given and pledged across the glittering bowl.[1] There was extended disaffection in Oxfordshire, which took its cue from Oxford, for the University was

T. U. V. W. . . . Truss Up Vile Whigs.
. . . . . Tuck Up Whelps.
X. Y. Z. . . . . 'Xert Your Zeal.

See *Notes and Queries*, vol. vii. pp. 105, 220.

There must be few who have not heard the clever *equivoque* of John Byrom (1691-1763), but it is so often wrongly quoted that it may well find a place here:—

God bless the King, I mean the faith's defender;
God bless—no harm in blessing—the pretender;
But who pretender is, or who is King,—
God bless us all,—that's quite another thing.

This toast might have suited the humour of the singular gentleman in the North of England who "would rather be thought a Malcontent than drink the King's health when he was not a-dry."—*Spectator*, No. 576.

[1] A Silesian-shouldered glass in the collection of the author, $6\frac{3}{4}$ inches high, has God Save King George in relief on the four sides of the upper part of the stem, and a crown on each shoulder. Mr. Syer Cuming has the upper portion of the stem of a similar glass recovered from the Thames in 1847. These are partisan glasses of the time of George I. Dr. Burd has a similarly shaped glass, $8\frac{1}{4}$ inches high, with an heptagonal stem, with God Save King George moulded on the shoulder. On the bowl is engraved Adam and Eve, the Tree of Knowledge, with the serpent round it, various beasts and reptiles, and below the tree 1716, so the date of all these glasses is assured.

In the cabinet of the author is a very thick shouldered cordial water glass engraved with the heraldic rose proper, with one natural bud, and a butterfly. This is also of the time of George I., and may be an informal Jacobite relic (Fig. 306, *sup.*).

swarming with "Jacks,"[1] in Gloucestershire, and in the West of England; the gentlemen of the Duchy were eminently distinguished for their loyalty to the Stuarts, and doubtless the burgesses of Exeter and Worcester were "faithful" in the old sense of their chivalrous mottoes. London and Edinburgh had their Jacobite clubs, and if no special mottoed glasses can be assigned to the former city we may, perhaps, reasonably associate some of those on which the thistle is engraved to Edinburgh, or, at least, to a city beyond the Tweed.

With regard to the glasses, they will be most conveniently touched upon in the same relative order as the Groups have been to which they belong. In this way they fall so fairly well into place that something like an historical sequence becomes ascertained. But they do not readily submit to strict classification, and while some of the earlier glasses present certain mottoes and symbols apparently applicable both to the Old and to the Young Pretender, and are so far transitional in character, the later glasses thus decorated can only, for historical reasons, relate to the younger prince, though it is very doubtful whether any of these, except certain of the *Fiat* glasses, were treated in this way much before the movement for "the '45" or after the death of the Chevalier of St. George in 1766.

In consequence of the period of their manufacture and use, and as vessels of a superior kind to those for taverns, the air-twisted stemmed glasses naturally and greatly preponderate in the later Jacobite series. The whole may be divided into two kinds:—

I. Those with straight-sided or with bell-shaped bowls, and with compound or bulbed and knopped air-twisted stems, and

II. Those of the drawn shape with air-twisted stems.

The former kind, No. I., comprises the portrait glasses, or those on which either the profile, or the full-face bust of the Young Pretender occurs, the latter being the most frequent; nearly all the glasses with the Virgilian mottoes *Audentior ibo* and *Turno tempus erit*,[2] referring to the attempt of 1745—or possibly to that of the Old Pretender in 1715—and only rarely an example bearing *Fiat*, the

[1] "There is no news stirring—but that there has been a most terrible riot at Oxford on ye 23rd of last month wch is the pretender's youngest son's birth-day; K. George was damned & King James blessed, in the open streets, by open daylight, and the Vice-Chancellor (who is a Jack) is sent for up —to give an acct of his conduct. I am in attendance at Court wth a very clever man of that university, who tells me yt Jacobitism at Oxford at this time wears less reserve, & cares less about the Decency of the exteriour yn in the year 15. God save us."—Edmund Pyle, D.D., to Samuel Kerrich, D.D., March 24, 174$\frac{7}{8}$—*Original Correspondence*, 1633-1828, *ut sup.* vol. xiv. p. 51, in the possession of Albert Hartshorne.

[2] *Æneid*, Lib. IX. 291, and Lib. X. 503. The former is the motto of the Oliviera family.

"word" of the Cycle, always engraved in italics,—the easiest letters to cut on the wheel, and, more rarely still, the Oak Leaf which must refer to Restoration.

The latter kind, No. II., includes all the drawn air-stemmed glasses which bear, almost without exception, the word *Fiat*, some of which may have been made for the Cycle as early as in 1730, and a few straight-sided, plain-stemmed glasses similarly signed; the former never present the portrait of the Young Pretender, perhaps only because the funnel shape did not lend itself readily to the execution of that decoration by the wheel.

More particularly as to the glasses ranged under the kind No. I. The profile portrait is enclosed within a wreath of laurel, flanked respectively by the heraldic white rose of Stuart, with two natural buds—said to be emblematic of James II., and the Old and the Young Pretender—and the thistle, with a star *en soleil* at the back of the glass, and no other sign or motto. A glass in the cabinet of the Dowager Lady Williams Wynn, and one in the Shreiber collection at South Kensington (Fig. 354), both with straight-sided bowls and knopped stems, but greatly varying in shape, are examples of these. On 8th November 1881 a sale of the effects of the late Mr. W. J. Clement, M.P., took place at the Council-House at Shrewsbury. Among the items were ten Jacobite wine-glasses with knopped and bulbed air stems, obtained by Mr. Clement from a descendant of Sir Matthew Hale. One of these, a straight-sided glass, was engraved with the bust in profile of the Young Pretender within a wreath of laurel, flanked by the rose and thistle, like the example at South Kensington (Plate 58, 2). This was bought for £5 as a representation of James I. Imitations of these glasses are now being sold for £4 each.[1] The nine remaining glasses with bell-shaped bowls were procured by the trustees, and one of these objects, the type of the rest, a very elegant bell glass, engraved with the usual rose and two buds, and a thistle with a star resting on its plume—a rare feature—is here illustrated (Plate 58, 1). Like the other glasses with this character of stem, the series in question must be a few years previous to "the '45." There seems reason for suspecting that the profile-portrait glasses are among the earliest of the Young Pretender series proper, and that they were engraved in Edinburgh. But they cannot be much older than those which exhibit the full-face portrait within a plain circle, flanked by the rose and thistle, and with the motto AUDENTIOR IBO over it—perhaps also engraved in Scotland but by a different hand—or than the other glasses from the Shrewsbury Council-House. Two of the portrait AUDENTIOR IBO glasses are in the collection of Mr. W. Murray Threipland. They were originally alike in shape, but little more than the bowl of one now remains

[1] See p. 276.

1

2

58.—ENGLISH GLASS—JACOBITE.

59.—ENGLISH GLASS—JACOBITE.

60.—ENGLISH GLASS—JACOBITE.

(Fig. 355), and the stem of the other has been mended. The engraving is more delicately treated on the latter, indicating a different artist. Mr. F. Harman Oates has an excellent example, obtained in Essex, and formerly belonging to the Harbottle Grimston family (Plate 59). All these have knopped and shouldered stems and straight-sided bowls, and correspond in the irregularity of their air-twists with all the glasses of this character.[1]

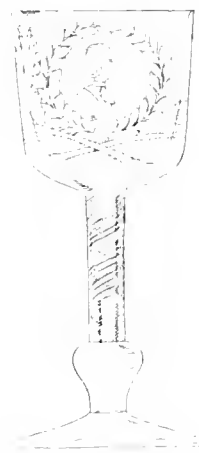


FIG. 354. (One third.)

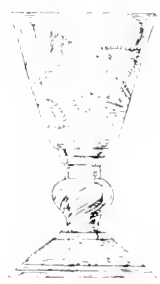


FIG. 355. (One third.)

In the possession of Miss Brownson is a straight-sided glass with a plain stem, engraved with the full-face portrait of the Young Pretender, as usual in "his bonnet and plaid," within a garter inscribed AUDENTIOR IBO; on the other side is the heraldic Stuart rose with seven petals—the only example of the kind that has been noticed[2]—and two buds. In an unexpected position, on the under side of the foot, is engraved a thistle with stem and two leaves, 3 inches long. This glass came from Manchester, and has a pedigree which takes it far back into the last century.

The Rev. S. M. Mayhew has a thick ogee-glass with an air-twisted stem, engraved with the full-face portrait, flanked by the rose and thistle, *Fiat*, and the star. It is perhaps of Scotch origin, as must be a plain drawn glass in the Museum of the Society of Antiquaries of Scotland, engraved with a triple-headed thistle, crowned, flanked by two ribbons on which is inscribed respectively, REBEL NO MORE and MAY THOU FLOURISH. This glass is perhaps unique.

The Rev. W. N. Berkeley has a large ogee-glass with a simple twisted air-stem formed from two drawn bubbles; the bowl is engraved with the full-face portrait within a circle, CAROLUS on a ribbon over it, and flanked by the usual rose and thistle. This is about 1750.

In Her Gracious Majesty's collection of Stuart relics at Balmoral is a pair of cordial-water glasses, 3 inches high, such as were used in Hogarth's time, and of a shape now identified with some of the rites of Freemasonry.[3] Each is engraved with the full-face portrait within an oval, and AUDENTIOR IBO below it, and the conventional rose — but with five petals only, like the heraldic rose proper—and two natural buds.[4] An example is illustrated here from the Preston Museum (Plate 60).

[1] A few years ago four AUDENTIOR IBO glasses were disposed of at Mr. Watt's sale at Bishop Burton, near Beverley. They are very scarce.

[2] See p. 258.

[3] See pp. 321, 323.

[4] See p. 258. These were given to the Queen

Here may also be mentioned an ogee-shaped glass in the British Museum with the stem cut into small facets; on the bowl is engraved the portrait of the Young Pretender in armour, flanked by military trophies and polished decorations, and beyond these a natural rose, and a nondescript flower in which the usual process of engraving with dull and polished work is reversed. Over the bust are the Prince of Wales's Feathers out of a coronet, and below it AB OBICE MAJOR. The glass may be as late as 1788, and a mere memorial of the Young Pretender.

Mr. R. N. Smyth has a tumbler with a beaded border, and a profile portrait of the Young Pretender within a conventional laurel wreath. On the left breast a star is worn, as usual in the portraits, and over the shoulder a broad ribbon charged with the letter X from which a short chain, sustaining a chaplet of beads and a cross, depends. This, though not quite accurate, is perhaps intended to represent the Papal decoration of the Cross of Christ. It is imperfectly shown in the same position on some of the portrait wine-glasses.

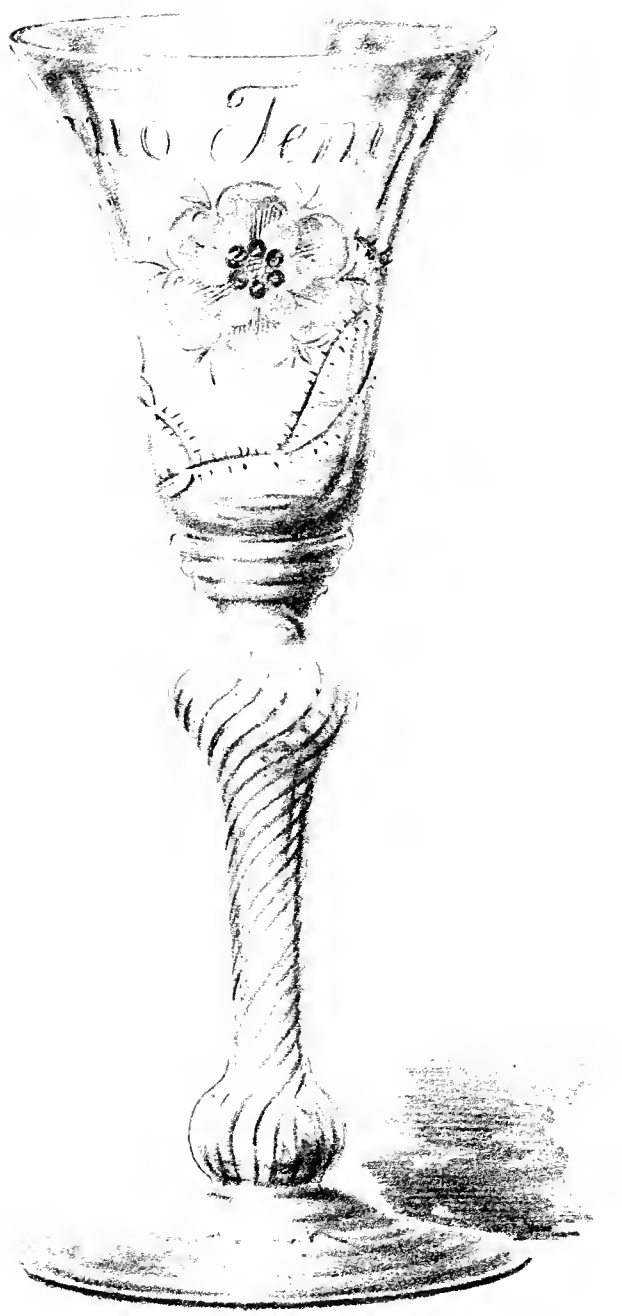
The glasses engraved with the motto TURNO TEMPUS ERIT are further decorated with the heraldic Stuart rose and two natural buds, a star *en soleil*, and the word *Fiat*. The examples which have fallen under the author's notice have the additional resemblance to each other of bell-shaped bowls, and bulbed but not knopped stems, and no doubt are all from the hand of the same engraver. Mr. G. Sandford Corser has a capital example (Plate 61), and so has Mr. W. Stephenson; a third has passed out of sight through the hands of a dealer. These are the only glasses with a Virgilian motto which appear to be connected with the Cycle.

In the collection of the Rev. S. M. Mayhew is a straight-sided wine-glass with an air-twisted stem of two tubular spirals. On the bowl is engraved the Prince of Wales's Feathers, with the uncommon motto RADIAT below, and, on the other side, the royal arms of England and Scotland quarterly, such as they were never properly borne by any Sovereign (Fig. 356). At Radbourne Hall, Derbyshire, several glasses inscribed REDEAT are preserved.[1]

In Mr. Singer's collection is a straight-sided glass with a knopped and bulbed air-twisted stem, engraved with the rose and two buds and the oak leaf (Fig. 357). Mr. J. L. Way has a beautiful glass with a similar stem, engraved with a rose and one bud, a thistle, and *Fiat* (Fig. 358), and Mr. P. H. Bate has a like glass with a shouldered air-twisted stem, engraved in the same way, but without the "word." It is possible that the occurrence of the rose and thistle are in allusion to the oft-

in 1891 by Mr. H. C. Walton of Preston; they formed part of a set belonging about half a century ago to a North Yorkshire family. Mr. Walton gave two similar glasses to Col. Meurant, and has deposited one in the Preston Museum (Plate 60).

[1] See p. 354, footnote.



61.—ENGLISH GLASS—JACOBITE.

attempted and finally accomplished Union of 1707. All these are probably early Cycle glasses. Another air-stemmed glass, also in Mr. Way's possession, has the rose and two buds, *Fiat*, and the oak leaf on the bowl, and the Prince of Wales's Feathers on the foot (Fig. 359). This is a Cycle glass of about 1740. In Her Gracious Majesty's collection at Balmoral is a glass with a bell-shaped bowl, and a bulbed and knopped stem. It is engraved with the rose and thistle and the rare motto—"Cujus est cuique suum reddite."

Mr. J. C. Ford has a most attractive drawn glass, with a plain octagonal stem cut into long flutes running up into the bowl. It is engraved with the rose and the thistle, and is a type of great rarity, perhaps unique (Fig. 360).

It was in accordance with the social practice of the age that one of the results of disaffection to the Hanoverian dynasty should be the establishment of secret clubs,

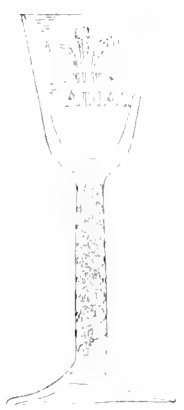


FIG. 356. (One third.)

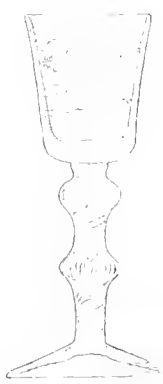


FIG. 357. (One third.)

FIG. 358. (One third.)

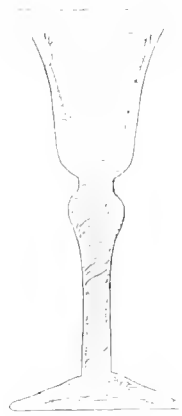


FIG. 359. (One third.)

FIG. 360. (One third.)

where "The Cause" was speeded, and the health of "The King over the Water" drunk by each member standing and holding his glass over a bowl of water, and giving "The King." This was a picturesque innovation, suited to the circumstances, but the old Cavalier custom of drinking the King's health on the knees lingered far into the reign of George III., particularly at Oxford and in military circles.

The ballad of "The White Rose over the Water, 1744,"[1] thus describes the Jacobite practice :—

> Then all leap'd up, and joined their hands
> With hearty clasp and greeting,
> The brimming cups, outstretched by all,
> Over the wide bowl meeting.
> "A health," they cried, "to witching eyes
> Of Kate, the landlord's daughter!

[1] G. W. Thornbury, *Songs of the Cavaliers and Roundheads, Jacobite Ballads*, etc., p. 102, Edit. 1857. In its later social period the members of the Cycle stood on their chairs with one foot upon the table, after the manner of a Club of true Highlanders on St. Andrew's Day, and drank "The King," passing their glasses over the water-bottles.

But don't forget the white, white rose
That grows best over the water."

. . . . .

"But never forget the white, white rose
That grows best over the water."
Then hats flew up and swords sprang out,
And lusty rang the chorus—
"Never," they cried, "while Scots are Scots,
And the broad Frith's before us."

The glasses which appear to have played the largest part in the thrilling ceremonies thus alluded to are those of kind No. II., with drawn air-twisted stems, and bearing, with some rare exceptions, whatever other sign may be upon them, *Fiat*, the "word" of the Cycle. This club was founded at Wynnstay on the anniversary of the birthday of the Chevalier of St. George, 10th June 1710, and its influence appears to have extended throughout the greater part of the disaffected region in the border countries of England and North Wales already spoken of. The earliest existing list of members is of 1721, preserved at Gwernhayled; the old books, with later names of members, and relating to the business of the club, are at Nerquis Hall, Flintshire; they were kept by several members of the Wynne family, the last secretary having been the Rev. Lloyd Fletcher, who assumed the surname of his maternal ancestors—Wynne, and died in 1864.

The Cycle appears to have been reconstituted in 1724, when the following rules were drawn up, and in which the political character of the club is of course studiously concealed:—

"We whose names are under written do promise to Meat at the Time and Place to our Names respectively affixed and to observe ye rules following viz.:

"1. Every Member of this Society shall for default of his appearance submit to be censured and shall thereupon be Censured by the Judgment of this Society.

"2. Every Member that cannot come shall be obliged to send Notice of his Non appearance by 12 of the Clock at Noon together with his Reasons in Writing, otherwise his Plea shall not excuse him if within the Compass of 15 miles from the place of Meeting.

"3. Every Member obliges himself to have Dinner on the Table by 12 o'clock at Noon from Michaelmas to Lady Day & from Lady Day to Michaelmas at one of the Clock.

"4. The respective Masters of the places of Meeting oblige themselves to take down in Writing each default and to deliver in the same at the General Meeting.

"5. Every Member shall keep a Copy of these Articles by him to prevent Plea of Mistake.

"6. It is agreed that a General Meeting shall be held of all the Subscribers at the house of Daniel Porter, Innholder in Wrexham on the 1st day of May 1724 by 11 of the clock in the forenoon and there to dine and to determine upon all Points relating to and according to the sense and meaning of these Articles.

"1723 Thomas Puleston May 21
Rich[d] Clayton June 11
Enbule Lloyd July 2
Rob[t] Ellice July 23
W. Wins Wynne Aug 13
Jno Puleston of Pickhill Sept 3
Thos Eyton Sept 24
Wm Eduards Oct 15
Thos Holland Nov 6
Ken Eyton Nov 26
Phil Egerton Dec 17
Jno Robinson Jan 8
Geo Shakerley Jan 29
Robt Davies Feb 19
Jno Puleston Hard y Wern March 13
Broughton Whitehall April 3 1724
Wm Hanmer April 24."[1]

The following Song, without date, but before the middle of the last century, was communicated by the Rev. Maurice Wynne, D.D., Rector of Bangor—the last male descendant in direct line of the great house of Wynne of Gwydyr—to the Rev. P. Ravenscroft in 1829, and by whom as Secretary it was copied into one of the Cycle books.

Cycle Song.

I hope there's no soul,
That over his Bowl,
But means honest Ends to pursue,
With the Voice goes the Heart,
And let's never depart,
From the Faith of an honest True Blue.
(Chorus)
True Blue! From the Faith of the honest True Blue.

For Country and Friends,
Let us damn private Ends,
And keep old British Virtue in View,
Despising the Tribe,
Who are bought by a Bribe,
Let's be Honest and ever True Blue.
True Blue! etc.

[1] The author is indebted to Miss F. Lloyd Fletcher for a transcript of this document, for a copy of the Cycle song, "True Blue," and for other information concerning the Club.

Here's a Health to all those
Who Slavery oppose,
And our Trade both defend and renew,
And to each honest Voice,
That concurs in the Choice,
And Support of an honest True Blue.
True Blue! etc.

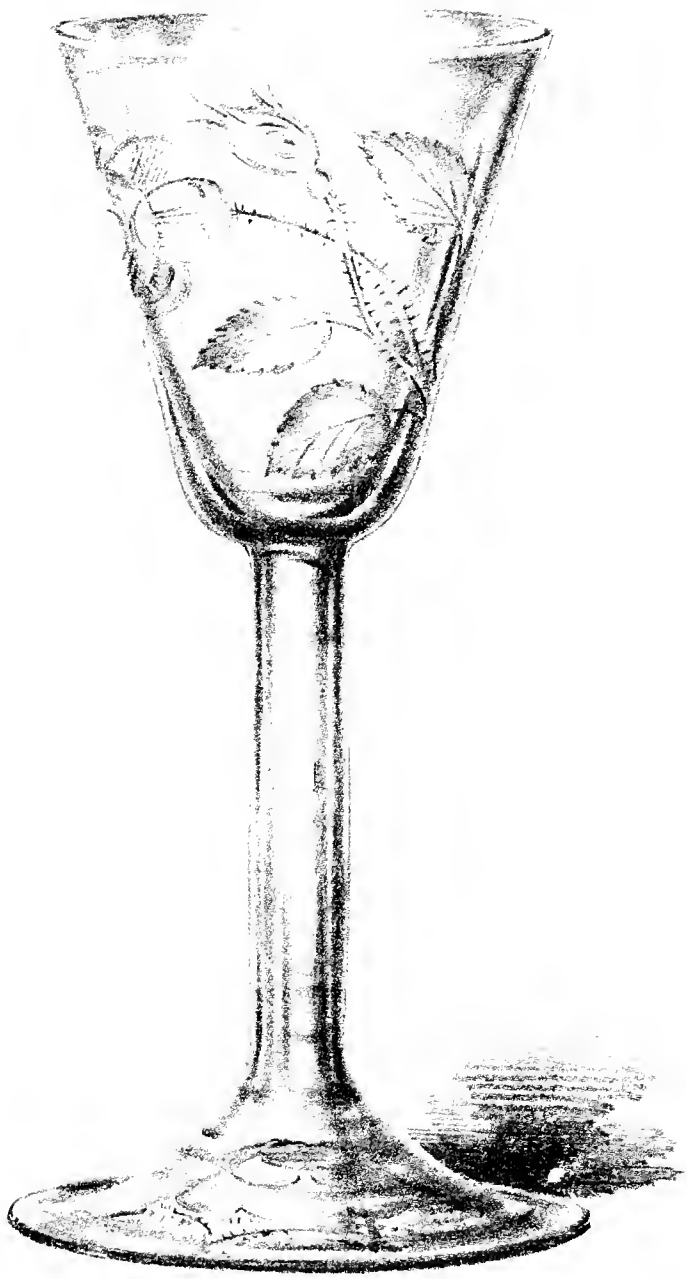
For the Days we've misspent,
Let us truly repent,
And render to Cæsar his due,
Here's a Health to the Lad,
With his Bonnet and Plaid,
For the World cannot stain his True Blue.
True Blue! etc.[1]

A characteristic of the club was that a new member was elected every month, and it appears that it was the custom to dine in rotation at each member's house within the compass of 15 miles, and that a general meeting was held as necessity dictated. Thus, if the number was unlimited, a point as to which we have failed to obtain information, by a process of dilatation the Cycle must have formed in its political period a very considerable body; and if we may assume that every member provided himself with glasses proper to drink "The King over the Water," their number also must at one time have been very great. No doubt the persons "well affected to the present establishment both in Church and State" were evil disposed to the Cycle glasses, and broke them as often as occasion offered. But we are inclined to think that the usual Rose glasses, with nothing suspicious about them, would have generally and sufficiently served the purpose in view, or, indeed, any vessels—provided that the bowl of water was there—and that this would account for the number of glasses engraved with the rose and two buds and the innocent passive butterfly, which were so easily collected nearly sixty years ago by the late Mr. Hartshorne and Mr. Albert Way in Shropshire and the Welsh borders.[2]

A very picturesque straight-sided glass of about 1745 with a plain stem, in the cabinet of the author, has two natural roses and buds engraved on the bowl, and on the under side of the foot the conventional white rose of Stuart.

[1] This verse was added in 1745.

[2] See p. 272, footnote. It should be noticed that in many of the glasses the emblems appear in odd positions, in accordance with the space occupied by the rose and two buds, as if the former were afterthoughts. But upon no glass engraved with the rose and two buds, together with the butterfly, or with the vine leaves and grapes and the hovering bird, do Jacobite emblems appear. These were the best society glasses, and to have added any Jacobite emblem to them would have been irregular, and confusing with regard to the butterfly and the bird which were mere artistic decorations.



62.—ENGLISH GLASS—JACOBITE.

This appears with the happiest effect when the glass is raised, and indicates that the Jacobites utilised the ordinary Rose glasses in the way that has already been suggested[1] (Plate 62). A similar glass is in the possession of Mr. P. H. Bate, but no others have fallen under the author's observation.

An entry in the Cycle books, dated 9th April 1770, runs as follows: "At a meeting of the gentlemen of the Cycle held to-day at the Eagles in Wrexham for fixing a new Cycle." This is followed by rules about balloting, etc. The club was then non-political, and an idea of the numbers of this, the parent society, may be gathered from the undated printed circular lists of the time, varying between forty and sixty members.

For the reasons already given the Cycle must have nearly lost its significance as a political club before the end of the second half of the eighteenth century. It must, indeed, have been quite obvious to all sensible Jacobites that their "King over the Water" was an impossibility after the accession of the English-

FIG. 361. (Full size.)

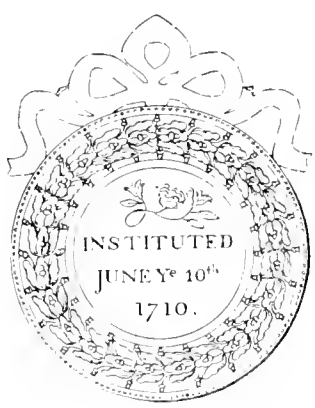


FIG. 362. (Full size.)

born prince who "gloried in the name of Briton." The gradual change of the Cycle from a political to a purely social body had, in fact, long been completed in 1780 when the new era was marked by the election, 14th February, of a Lady Patroness. This honour was conferred on Lady Williams Wynn, and entailed on her successors Ladies of Wynnstay, and a gold badge or jewel made, enamelled on both sides in green, "true blue," and white, to be worn at Cycle functions. It is a tasteful decoration of a time when there was still some idea of design in jewellery, and is surmounted by a knot in brilliants, arranged in three loops for suspension (Figs. 361, 362). To the new era also belongs the flat circular Cycle Club Button, a little less than an inch in diameter. On the smooth gilt surface is a wreath of oak leaves and acorns, within a dotted border, all in relief. In 1829 a proposal to have a new button with the Cycle emblems as in the Jewel

[1] See p. 258.

was, with a proper conservative spirit, successfully resisted. As late as 1864 a motion to wear white waistcoats was "carried." Of the Cycle coat nothing is recorded.

In 1815 a copper-plate was engraved showing the names of thirty-four members of the Cycle, for that and the two preceding years, within a set wreath of oak leaves and acorns, fastened with a true lover's knot tied up with ears of barley. The proofs are printed in green ink, and the names radiate, as in a round-robin, from the centre, which displays the badge of the Cycle, as it is shown on the obverse of the Jewel, circumscribed by *Lady Williams Wynn, Lady Patronefs*, within a wavy circle of vine leaves and grapes. Immediately within the comprising border of oak leaves is *The Revd. P. Ravenscroft, Secretary*, and as a pendant on the opposite side, *Instituted, June 10th 1710.* Many other circular Lists of the social period exist, but they have no dates. The three phases of the Cycle appear to have been Political, Bacchanalian, and Social. In its last character it continued until 1869, when the club was broken up and the Jewel given to Lady Williams Wynn.

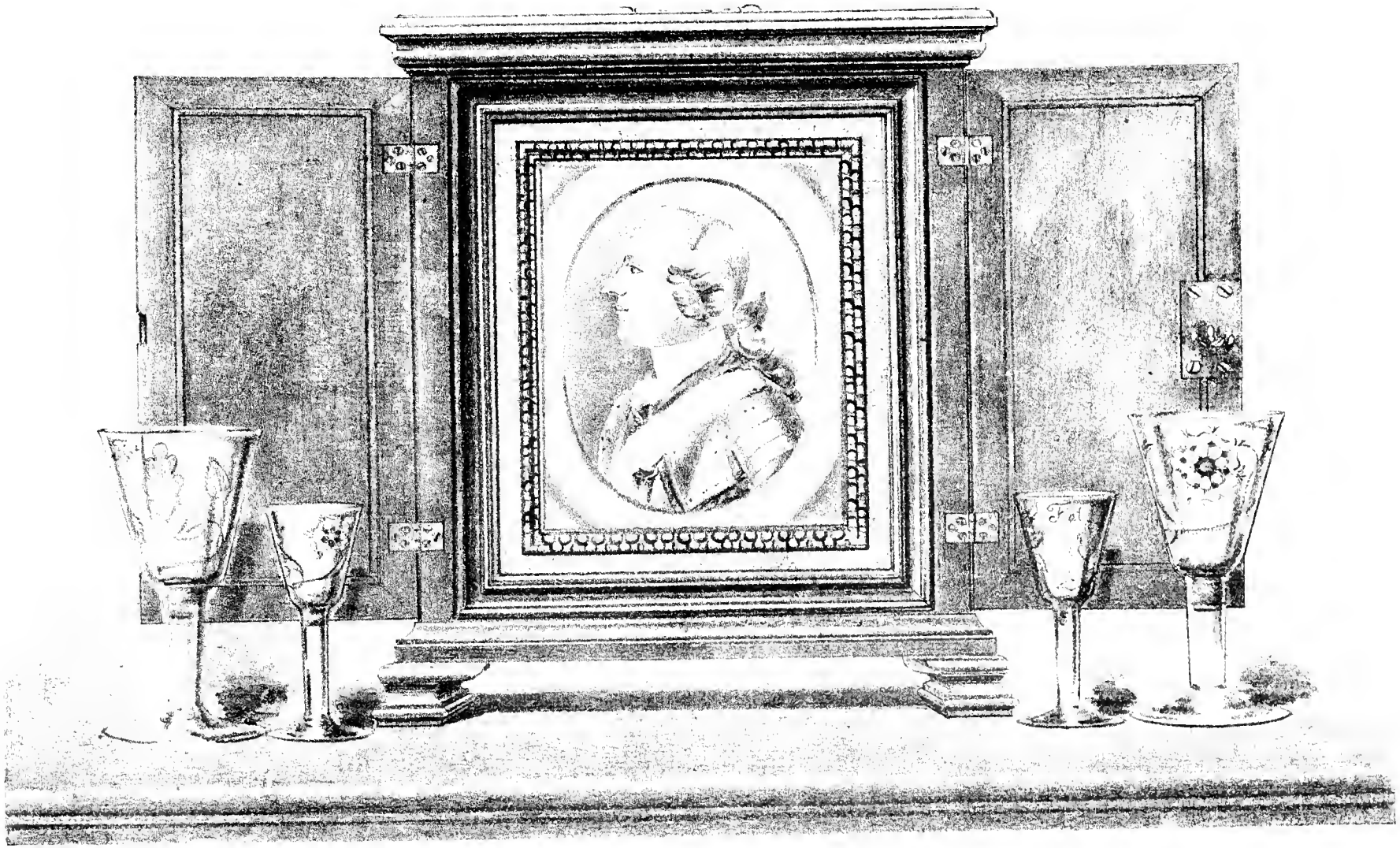
With regard to Cycle glasses, the Dowager Lady Williams Wynn, who became Lady Patroness in 1852, has the portrait glass already spoken of; the tall glass engraved with a natural rose and bud, and inscribed GOD BLESS THE PRINCE,[1] and the rare-shaped cordial-water glass engraved with the same rose and bud and HEALTH TO ALL OUR FAST FRIENDS;[2] these were used at Wynnstay, a wide earthenware jug, with a very rude portrait of Prince Charles Edward upon it, serving as the "bowl" for the water.

In the possession of Sir P. Grey-Egerton are six goblets and four glasses of the excellent straight-sided shape, already notified, with plain stems. All are engraved with the rose and two buds, the star, *Fiat*, and the oak leaf.[3] Associated with these is a shallow walnut-wood cabinet about fourteen inches high, standing on moulded feet, and with panelled doors and a lock. It is just deep enough to contain a framed bust portrait within an oval, painted in profile, a handsomer face than usual, of the Young Pretender. The prince is shown in armour, a very late example of the fashion in portraits, with a lance-rest on the left side, because the painter did not understand its use; and he wears his own hair tied back with a bow of ribbon (Plate 63). It was customary at the Cycle meetings at

[1] See p. 350.

[2] See p. 320.

[3] The *quasi*-heraldic Stuart rose with six petals, and two buds, is said to typify James II., and the Old and the Young Pretenders; the Star must be a luminary of the same nature as that which the great Napoleon ever had in his mind. The Jacobites are said to have kissed this token of promise on emptying their glasses to "The King over the Water." *Fiat* is taken to be the "word" of the Cycle, but there seems to be no absolute proof of it, nor does it appear upon the Cycle Jewel; the Oak Leaf must be allusive to Restoration.



63.—CABINET AT OULTON PARK.

Oulton for the cabinet to be placed upon the table after dinner and the doors to be unlocked with some ceremony, and the health of the prince given. From the youthful appearance of the portrait it probably dates from the days of Sir Thomas Grey, sixth baronet, who died unmarried in 1744, or of his successor Thomas, who died in 1756.[1]

The procedure in drinking the health of Prince Charles Edward at Oulton Park, differing altogether from the usual Jacobite practice, was a revival of a custom of Royalist Societies after the death of Charles I. At that time a distorted portrait of the King was laid upon the table, a short cylindrical mirror placed on a certain marked spot, and the royal face was imaged in the glass to the guests, who then drank to his memory. In the event of a raid by the Roundheads the cylinder was placed in the doublet of a cavalier, and nothing flagrantly incriminating was apparent.

In the possession of Miss Hartshorne is a linden-wood panel measuring 1 foot 3 inches long and 12½ inches wide, and ¼ inch thick. Upon it is painted in thin oil colours a distorted portrait of Charles I. To this appertains a cylindrical steel-glass mirror,[2] 1¼ inch in diameter and 3½ inches high, including its turned wooden cap. The King's full face is admirably presented in the steel-glass placed upon the circular space left for it upon the picture, just as it appears in the well-known triple portrait by Vandyke at Windsor, probably the most accurate likeness of Charles I. in existence.[3] Miss Hartshorne's panel has never been varnished, no doubt to obviate glitter in the reflection; it is believed to have descended in the family from John Postlethwayt, the distinguished scholar and Chief Master of St. Paul's School from 1697 to 1713. A still earlier instance of a distorted royal portrait is given by Walpole, who mentions as among the stores of old pictures at

[1] In an original invoice preserved at Oulton Park, of Derby-Chelsea china sent by Dewsbury and Co. to Philip Egerton, Esq., 1st December 1771, is the following entry:—"2 Quart Jugs with the word Fiat and rose & thistle 2.2.0."—See Chaffers, *Marks and Monograms on Pottery and Porcelain*, p. 801, Edit. 1874. These capacious *Fiat* jugs indicate the change that had come over the Cycle, and suggest a more open and generous use than was implied by the little glasses in the political period. Mr. Egerton of Oulton was a great-grandson of the loyal Sir Philip Egerton, who was knighted by Charles II., and father of John Egerton, who succeeded as eighth baronet on the death in 1814, without surviving male issue, of his kinsman, Sir Thomas Grey, seventh baronet, who had been raised to the peerage as Baron Grey de Wilton, and created Viscount Grey de Wilton and Earl of Wilton.

[2] See Appendix, Inventories, No. VII., *Steele Glasses.*

[3] It was from the triple portrait, which was sent to Rome and remained there until the end of the last century, that Bernini produced the marble bust which perished in the fire at Whitehall in 1691. It has the special interest of showing the difference in the right side of the King's face from the left in which the historic pearl earring is shown. This precious relic was taken from the King's ear after his execution and given to the Princess Royal. It afterwards belonged to her niece, Mary II., and is now in the possession of the Duke of Portland.

Somerset House, "the head of Edward VI." on a long board—such as would have been spoken of at the time as "a painted table"—"to be discerned only by the reflection of a cylindric mirrour."[1] This work was signed "Gulielmus," identified by Walpole as Marc Willems. There is a distorted portrait with the Garter motto below it, painted on canvas, said to be of the Young Pretender, at Tabley Old Hall; on the spot where the cylindrical glass would stand is a small proper picture of the Prince. A distorted portrait of the same personage, painted on panel and representing him through the medium of a polished steel cylinder, in Highland costume, is vaguely said to belong "to a well-known Perthshire family."[2]

To return to the glasses. Mr. J. Mortlock has a straight-sided glass akin to those at Oulton, engraved with the same emblems, and with the exceptional detail of a folded foot; Mr. J. Lane has another, somewhat thinner, decorated in the like way. They tend in their character rather to tavern than to private-house glasses.

To take now the drawn air-stemmed glasses in kind No. II. We have spoken of the Loyal Brotherhood at Badminton—of whose glasses we know nothing; and we have touched upon the disaffection in Oxfordshire and Gloucestershire.[3] Of the latter interesting evidence is supplied by a set of eleven *Fiat* glasses in the possession of Miss Whitmore Jones, and preserved in her beautiful Jacobean house of Chastleton, each engraved with the rose and two buds, the oak leaf, and *Fiat*, the star being absent from all of them; and by two decanters respectively 8 inches and $9\frac{3}{4}$ inches high, without their pyramidal cut and faceted stoppers. These flasks are engraved with the rose and two buds, two oak leaves on a sprig and a circular compass, of which the indicator or fleur-de-lis is directed towards a star *en soleil* (Plate 64). The limited size of the decanters forbids the supposition that they were for anything less potent than ardent waters. All these objects have particular interest, not only as the most important series of Jacobite glasses in the kingdom, but because it is known that they belonged to Henry Jones of Chastleton, a zealous Jacobite, who died in 1761, and were made for the use of a Gloucestershire Jacobite club, which, doubtless, met at his house on the Oxfordshire borders. It would seem from the emblems that the Society was in union with the Cycle, but upon the associative aspect of Jacobitism in this respect there is no further evidence.[4] The Rev. W. Walker Woolcombe

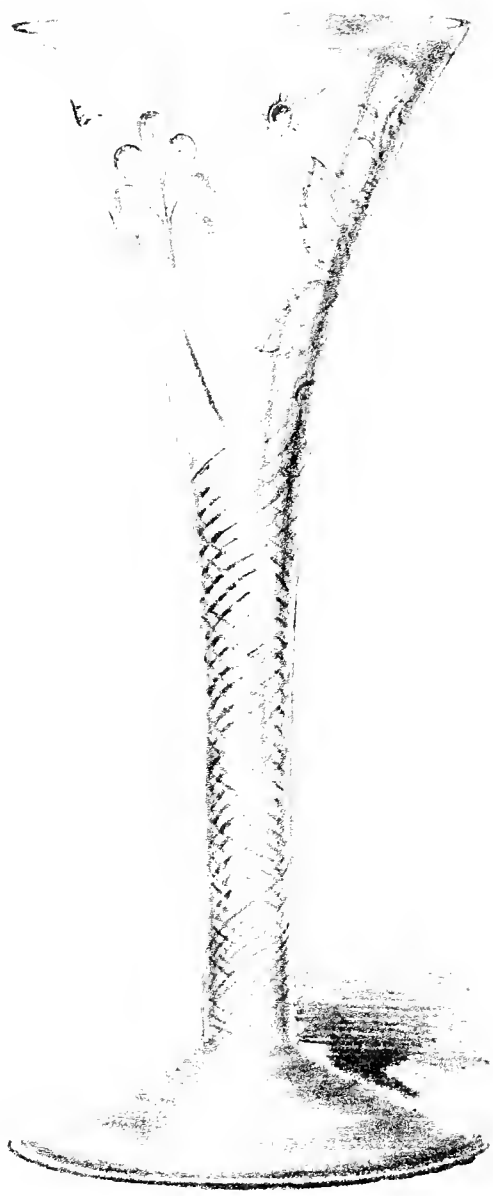
[1] *Anecdotes of Painting*, vol. i. p. 201, Edit. 1782.

[2] *Notes and Queries*, 5th S., vol. viii. p. 328.

[3] See pp. 352, 358.

[4] Henry Jones, "the Jacobite," following the custom of his ancestor, the planter of the Restoration Oaks, and in deference to his own principles, planted Scotch firs, still standing in the formal gardens of Chastleton; it is believed that this was a practice often carried out at the time. Trees are said to have been beheaded in many parts of England in token of grief, and in memory of Charles I.;

64.—ENGLISH GLASS—JACOBITE.



65.—ENGLISH GLASS—JACOBITE.

has three drawn air-stemmed glasses like those at Chastleton, and again without the star. These were long preserved in the loyal Walker family at Exeter, and, with the Chastleton glasses, may represent a west-country type. Lord Torphichen has six *Fiat* glasses engraved with the full number of emblems; the author has one of great delicacy, from Shropshire (Plate 65), and two obtained in Leicester in 1890; a few others like them have come under his notice, on which all the emblems are shown.

It is impossible to account for the absence of the *star* on so many of the *Fiat* glasses with drawn air-twisted stems. Two of this kind are in the collection formed by the late Dowager Marchioness of Huntly (Fig. 363); two more belong to Mr. J. Wood (Fig. 364), one to Lord Leigh, and another was seen in the

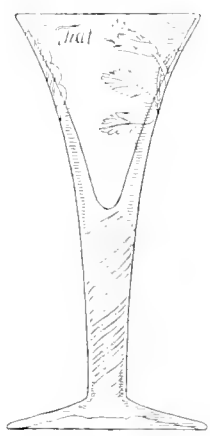


FIG. 363. (One third.)

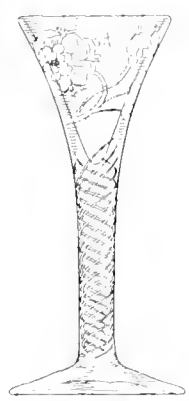


FIG. 364. (One third.)

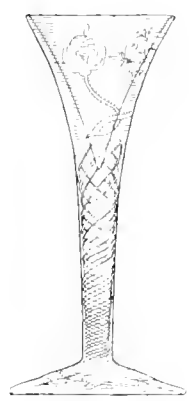


FIG. 365. (One third.)

hands of a dealer. A similar Jacobite glass in Mr. Singer's collection has neither *Fiat* nor star, but the rose with two buds, and an oak sprig with two leaves on the foot, all oil-gilded (Fig. 365). This is the only drawn air-stemmed glass without *Fiat* or other motto which has been observed, and must have formed part of a special order and quite unconnected with the Cycle.

In the possession of the Rev. W. Walker Woolcombe is one plain drawn and four drawn air-stemmed glasses of great interest. Each is engraved with the rose, two buds, the oak leaf, and the motto REDDAS INCOLUMEM; no other glasses with this maxim have been noticed. Another glass of the same kind is engraved only with the rose, two buds, the star, and the motto REDEAT, as in the Radbourne Hall examples. All these came, with the others already spoken of, from the same loyal sources in "The Ever Faithful City."

Among other capriciously decorated Jacobite glasses may be mentioned a

and the Duchess of Monmouth, widow of Lucy Walters's ill-fated son, is recorded to have decapitated the oaks in Moor Park in vengeance for her husband's execution, and to unfit their growth for timber for the navy. Many of the ancient oaks in Moor Park bear signs of such a treatment.

straight-sided example in the South Kensington Museum, with a knopped and bulbed stem, engraved on the bowl with the rose, two buds, and the oak leaf, but with neither *Fiat* nor star; and one in the possession of Mr. Okeover, with a shouldered air-twisted stem, which presents all the emblems except *Fiat*. Okeover, near Ashbourne, must have been far removed from the influence of the Cycle, but the glass may be a relic of the Occupation in "the '45."

Very few short *Fiat* glasses, of the cordial or strong waters type, appear to have survived. Admiral Roberston Macdonald, a member of the family of Macdonald of Kinlochmoidart, which suffered much in the Stuart cause, has two highly interesting straight-sided examples, about $3\frac{1}{4}$ inches high, with short air-twisted stems (Plate 66). On the bowl of one is engraved the rose and two buds, a stock of an oak with a small sprig of two leaves springing from its root, a star, and *Fiat;* on the upper side of the foot the Prince of Wales's Feathers simple. On the other glass is the rose as before, a tree stock burging into small leaves, REVIRESCIT in the place of *Fiat* and the Prince of Wales's Feathers in a coronet on the foot. Lord Torphichen has a heavy Hogarth or "firing" glass inscribed *Fiat*, and a capacious goblet, 10 inches high, engraved with the usual rose and two buds to a large scale, and two separate oak leaves and *Fiat* on the foot. Finally, the Rev. W. N. Berkeley has a small ogee-shaped glass with a faceted stem engraved with the rose and two buds and a star—a lingering and belated example, about 1775, of a glass dedicated to the expiring Jacobite *culte*.

The question of assigning the manufacture of particular glasses to special glass-making centres must always be a difficulty.[1] But it may be provisionally suggested that the greater number of the rose-engraved glasses were made and engraved at Newcastle-on-Tyne. The remarkable similarity of all the roses, as well as the additional details on the glasses of the Jacobite *culte*, cannot be accidental. This points to a common source of production, and it seems more likely, and reasonable, that these semi-seditious, or openly contumacious objects, were made in glass-works removed from the immediate scrutiny of the Government, and thus convenient for acquisition both by Scotland and the most disaffected districts of England and Wales, than that they were fashioned in the neighbourhood of Stourbridge or in London. Bristol is improbable, because the better sorts of glasses made there were those with opaque-twisted stems, which are not attributes of Jacobite glasses, rather than those with air-twisted standards, which belong generally to the earlier half of the century. But it is possible that some few drawn air-stemmed Jacobite glasses were made at Bristol after

[1] See p. 259.

1

2

66.—ENGLISH GLASS—JACOBITE.

1750, and supplied the wants of the Western malcontents.[1] It appears likely that many of those engraved with the portrait, and the rose and thistle, were produced in Newcastle and decorated in Edinburgh; difference in the character of some of the engraving indicates this. That the generality of the *Fiat* glasses were made and engraved at Newcastle-on-Tyne there seems little reason to doubt, though there is, unfortunately, no actual proof of it.

[1] Mr. Hugh Owen, in his *Two Centuries of Ceramic Art in Bristol* (Edit. 1873), says, p. 379: "Bristol had a large trade in flint glass with a good reputation for it at an early period; but like other manufactures requiring fuel, it has naturally moved northward to the more immediate vicinity of the great coal-fields. Evans, in his *History of Bristol*, says that in 1761 fifteen large houses were employed in that manufacture; at this date (1873) there is only one of any importance." "In 1785 a large flint glass manufactory was commenced at Temple Gate, Bristol, called the Phoenix Glass Works. Messrs. Ricketts and Co. succeeded to the business in 1789. But it was closed some years ago."—See p. 281, *supra*.

IRISH GLASSES.

CHAPTER XXV.

ENAMELLING IN IRELAND IN EARLY TIMES—INTRODUCTION OF GLASS-MAKING—PROPOSALS AND EFFORTS FOR ITS CONTINUANCE—FRUSTRATION OF THE INDUSTRY—REVIVAL IN BELFAST, DUBLIN, CORK, WATERFORD, LONDONDERRY—WILLIAMITE GLASSES—THE ORANGE TOAST.

A KNOWLEDGE of the art of enamelling and glass-working appears to have existed in an advanced stage of perfection in Ireland from a period at least as early as the end of the seventh century. Mosaic glass and cameo heads are found in brooches, croziers, and shrines of Irish origin, exhibiting the Celtic taste and skill in filagree and inlaying which naturally asserted themselves. These productions have the high character to be expected from the imaginative and gifted sons of Erin, who worked so beautifully in the noble metals, and particularly in their own native gold, and brought the decorative arts to so high a point, not only in early days but in the remote pre-historic times of the Bronze Age. The Cross of Cong, the Brooch of Tara, the Crozier of Clonmacnoise, and the Chalice of Ardagh are well-known early objects. Certainly a not less interesting process than those mentioned is that of cutting, or more likely impressing, a pattern on the surface of a piece of glass when soft, after an Egyptian manner, and filling the indents with metal, glass, or enamel of another colour. Specially the Ardagh Chalice, apparently of the first part of the eighth century, exhibits a remarkable variety of enamelling processes, a peculiar Celtic art, and shows the complete mastery which its maker had over his materials.

As to the origin of such processes in Ireland opinions differ, but it seems not improbable that the enameller's art was first introduced into the island by the Phoenicians, who had naturally obtained the knowledge from Egypt. There are reasons for believing that Irish missionaries carried their mysteries into South

Germany in the eighth century. That of enamelling seems to have faded away in Ireland before the middle of the twelfth century. The beads found there most resembling the Egyptian may have derived directly from examples brought from Phoenicia, or from Roman types which survived them.

We have obtained no information whatever as regards Ireland that any glass vessels were produced there in mediaeval times; there is not even the assured evidence that we have as to this point in England, through the medium of window-glass making and painting, emphasised by a very few and widely-separated actual examples; it was not, in fact, until the end of the sixteenth century that any attempt appears to have been made in this direction in Ireland.

We have already seen[1] that George Longe made a proposal to Burghley, 3rd October 1589, to reduce the number of glass-houses in England, and to transfer the manufacture of glass under the petitioner's direction to Ireland. Longe's object was stated to be to put a stop to "divers" unlicensed glass-houses in England which wasted the woods, and to leave only four, and to set up, apparently, eleven new glass-houses in Ireland, employing in them all the English glass-makers thus thrown out of work, and many native "poore folke,"[2] and making use of the superfluous woods in Ireland—"then which in tyme of rebellion Her Majestie hath no greater enemy theare"—and sparing the waning woods of the Weald. Longe further states that he had also discovered in Ireland the proper materials for glass-making during two years' trial, and had brought the work to perfection. He says nothing about the revival of an art long practised there, as we might have expected if such had been the case; but it does appear that he had bought a general Patent for glass-making in Ireland from Captain Wodehouse, which cannot have been granted to him many years before, and who, together with Ralph Pylling, had assisted Longe in setting up two glass-furnaces in that country; very little progress had therefore been made. In a second petition by Longe it was urged that every glass-house set up in Ireland would be as good as a garrison of twenty men, and the matter seems to have been favourably considered by the Government; but it fell through chiefly, apparently, on account of the unsettled and lawless state of the country, which restrained English glass-makers from remaining there as long as work was to be obtained in England. It is further evident that the subject fell quite into abeyance, because in 5 James I. (1607-1608), that is, on the termination of Bowes's Patent, which ran in the realms of England

[1] See p. 158.

[2] The apparel of the bare-legged and bare-footed "Wilde Irische" at this time, consisting as it did chiefly of the Mantle, is well ascertained from cotemporary illustrations "dravn after the qvicke." It was singularly unsuited, as were the "poore folke" themselves, for any such occupation as Longe's proposal implied.

and of Ireland, Roger Aston obtained a grant for twenty-one years,[1] namely, until 1629, when Mansel's devouring Patent of 1623 for fifteen years was in full swing, to make all manner of glass for Ireland, and, as it appears, in England. The terms of Mansel's Patent show that there was then no glass-making going on in Ireland, and there is no proof that Mansel set up or licensed any glass-works there, or that any industry of the kind was carried on in that kingdom during his long sway. Conditions both political and social were against it. But whether the terms of Aston's grant freed him from tallage to Mansel we know not.

In 1675 the Glass-makers' Company gave leave to Ravenscroft to transport to Ireland or elsewhere beyond sea £400 worth of his "fflint glasses,"[2] the best then made, but not to send them to Scotland or anywhere in England and Wales, because the Company's market would thereby be prejudiced. In 1725 several dozens of glasses were procured from Bristol for Alderman Pembrock of Cork,[3] and it is significant that these were all vessels of small and simple kinds, such as any humble Irish glass-house could have made, and this is proof that no such establishment then existed there.

It is stated that the operation of the penal code in Ireland had a most pernicious influence in driving enterprise and capital out of the country, and that in 1788 a small attempt to create a manufacture of glass in Ireland was speedily crushed by an English law prohibiting the Irish from exporting glass to any country whatever.[4] This action of the Government, iniquitous as it was, would not have entirely closed glass-works in Ireland, because there was always the home demand to supply, and glass-houses were certainly working in Belfast—in the suburb of Ballymacarret—in Dublin, Cork, and Waterford long before the end of the eighteenth century, and to a small extent in Londonderry. The Belfast and Waterford trade passed to England about 1828. In the four first-named places the cut-glass industry was well established before 1800, and the art glass of Belfast at its best a little before that date, though massive and never quite clear, made a handsome appearance with its deep cutting. Similar glass of Cork, of the last quarter of the century, is also highly esteemed; it was perhaps the purest crystal produced in Ireland. As with the Belfast china manufacture, the glass-works there were much hindered by the price of coal, and this condition must have affected all glass-works in Ireland. There is no information that the glass made at Dublin and Cork had any special characteristics of metal or form, beyond those

[1] Patent Roll, 5 James I., p. 7 (1607-1608).

[2] See p. 242.

[3] See p. 282.

[4] *Memoir of M. S. J. Mac Carthy*, by the late C. D. Mac Carthy, and Constance A. Hartshorne, p. 2. Privately printed, 1885.

common to the generality of glasses in England of the end of the eighteenth century; but Waterford glass is usually to be distinguished by its pale blue tinge. The industry appears to have flourished better there than elsewhere in Ireland, and the table-services of glasses, decanters, tumblers, punch-bowls, etc., were fairly well though rather heavily cut with bands in diamond patterns just below the rims, and often with fluted stems, and the glasses with square feet as in the English examples of the time. Occasionally vessels were cut all over in a heavy diamond pattern, after the Amsterdam style.

As to the glasses themselves in Ireland the most important for our purpose are those in honour of William III. The earliest of these have engraved upon them the representation of the Deliverer on horseback crossing the Boyne (1st July 1690), and habited in a Roman lorica and paludamentum, and a full-bottomed periwig; or his bust showing him in the same garb in profile to the sinister, like the coins and medals of the reign. Both portraits are within circles, and surrounded by some of the opening words of the Orange Toast. Some later Williamite glasses are engraved with a natural rose and bud, the same inscription, and a border of vine leaves and grapes.

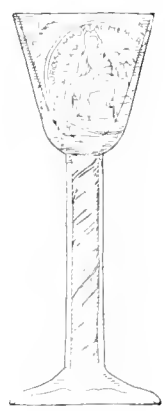


FIG. 366.
(One third.)

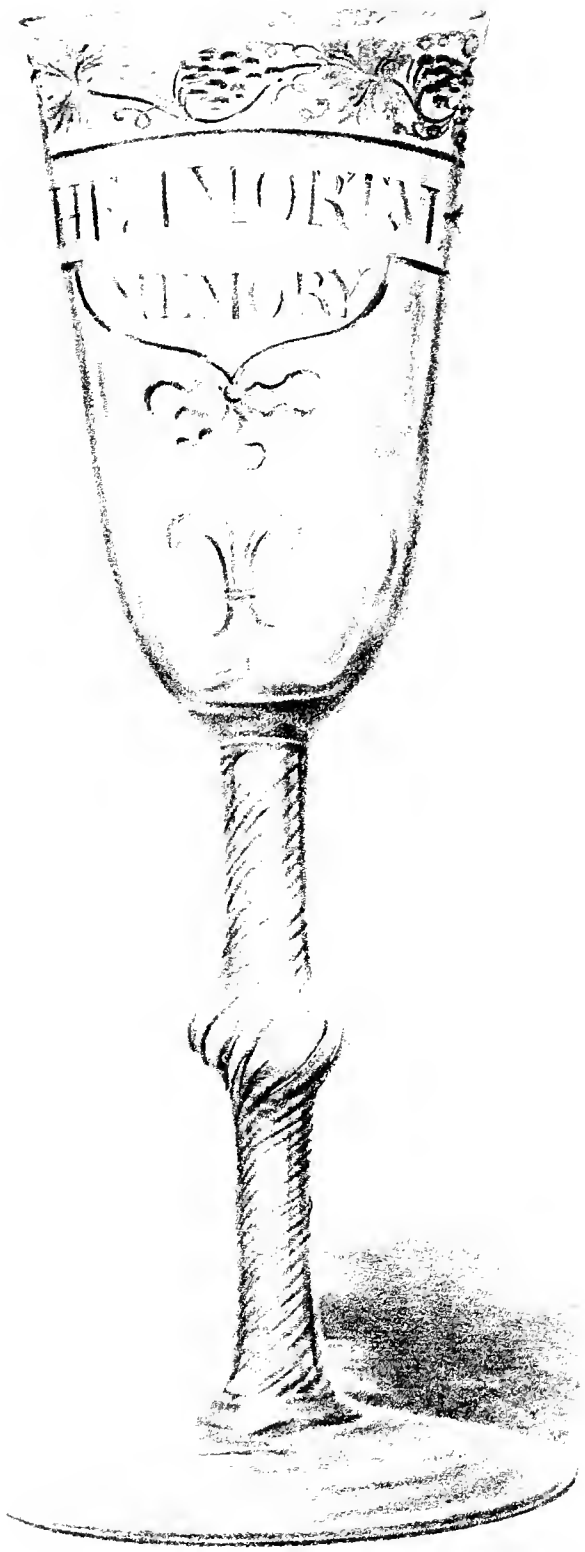
In the Museum of Practical Geology is a tall straight-sided glass of moderate capacity engraved with the King on horseback, as above, surrounded by the inscription, V GLORIOUS & IMMORTAL MEMORY OF KING WILLIAM, within a circle flanked by wreaths of conventional roses and daisies. The character of these shows that the glass cannot be earlier than 1755 (Fig. 366).

In the possession of Mrs. Lindsay, of Passage West, County Cork, are twenty glasses of the rare shape alluded to at page 320; all are engraved exactly alike, and they doubtless form the finest series of Williamite glasses in existence. On one side of the bowl is a capital bust of William III. in profile to the sinister, and evidently taken from the bust in the medal struck to commemorate the Battle of the Boyne; on the other side is a harp crowned between festoons of grapes and vine branches. In completion of the set are two decanters with cut pyramidal stoppers, like those at Chastleton, and engraved on one side with the bust to a larger size, surrounded by the inscription, THE IMMORTAL MEMORY OF THE GLORIOUS KING WILLIAM, and the harp crowned in the midst of a trophy of arms below; on the other side is a larger trophy supported by vine branches. One of the glasses was given to Mr. R. Day a few years ago, the number having originally been twenty-four. From time immemorial they have belonged to the Maylor family. Samuel Maylor,

born 1723, married Mary Kingston, descended from Captain James Kingston who, with his father and brother, fought at the Boyne under William III. The date of the glasses and decanters appears to be rather before the middle of the eighteenth century; they were probably made in Bristol, perhaps engraved in Cork, for Samuel Maylor, and have continued with his descendants up to the present day.

In the cabinet of the author remains a pair of Burgundy glasses, $7\frac{3}{4}$ inches high, of a late ogee shape, with knopped air-twisted stems. Each is engraved with a natural rose and single bud, and the inscription on a label, THE IMORTAL MEMORY (Plate 67). A third example has been deposited in the British Museum. Their date is about 1790, and they are probably of Irish, perhaps of Dublin make.

It seems to be a well-established fact that the Williamite glasses were not made and decorated primarily for Orange clubs, but for use in private houses on special days of Orange festivals—1st July, the day of the Boyne; 4th November, the King's birthday and wedding day, etc. Dr. Hoadly has left a curious account of an Orange or Whig meeting at the "Trumpet" in Shire Lane about 1712, at which his father, the Bishop of Bangor (1716-1721), was present, when Steele and others distinguished themselves in drinking to the memory of King William on 4th November. In 1713 Dr. Browne, Bishop of Cork, published his *Discourse of Drinking Healths*, in the process of which he severely condemned the custom of drinking to the Immortal Memory of King William. For this presumption an epithet against the bishop, which has several variations, was added to the already very tedious and inconsequent wording of the latter part of the toast. The opening expressions are: "To the glorious, pious, and immortal memory of the great and good King William who freed us from Pope and popery, knavery and slavery, brass money and wooden shoes"; this seems to be quite long enough for any toast, and should satisfy the most ardent Orangeman.



67.—IRISH GLASS—WILLIAMITE.

WINE IN ENGLAND

FROM EARLY TIMES TO THE END OF THE EIGHTEENTH CENTURY.

CHAPTER XXVI.

CLARÉ—PIMENT—WINE FROM FRANCE—ITS CHARACTER AND TREATMENT—VINE CULTURE IN ENGLAND — SPANISH WINE — BASTARD — RHENISH WINE — MALVOISEY—MUSCADINE—"PARELLED" WINE—HIPPOCRAS—WHITE WINE—DISTILLED WINE—IMPERIAL WATER—AQUA VITAE—"XERES SEC"—CANARY — SACK — LIST OF WINES FROM DOCUMENTS — WINE IN BOTTLES — SACK GLASSES—ALICANT—TENT—PORT—THE PORT WINE TREATY—ITS RESULTS—CLARET IN SCOTLAND AND IN IRELAND—PRICE OF PORT—ITS PRE-EMINENCE.

A STRIKING feature of Anglo-Saxon and other early vocabularies is the great number and variety of the drinks. Those of the more ancient kind have been touched upon in speaking of the glasses—the "hroden ealo wœge"—for the Anglo-Saxon "beor," *mulsum,* the "eala," *cervisia* of the Danes, the primitive metheglin and the hydromel;[1] while some of the ancient wines, pure, mixed, struck, or spiced, have also been alluded to in referring to the glasses for strong and cordial waters.[2]

As a desirable corollary to the accounts of the glasses some observations will now be made upon the wines which were in use in England during the Middle Ages, and down to modern times.

The Treatise of Alexander Neckam, written about 1190, gives an early mention of Claré. This was a mixture of the clear red wine—of which the best was from Guyenne (Bordeaux), with honey, sugar, and spices, as distinguished from Piment or nectar, which was much the same amalgam, but sweeter, of a darker tint and with more substance, being founded upon the red wine of Bourgogne, Auvergne, Dauphiné, and other south-eastern provinces of France. These

[1] See p. 300.

[2] See p. 316.

were the two principal sweetened and spiced wines used in England in the Middle Ages, and they were very different from the ordinary rough vintages from the same sources, some of which were often hardly drinkable.[1]

In a Nominale and a Pictorial Vocabulary, both of the fifteenth century, "clarete" and "pyment" occur; and in the latter document, of the end of the century, the expression "clerote wyne" is used to signify the claret of Guyenne and Gascogne, now generically known as Bordeaux, and to distinguish it from that of Auvergne, from "le petit vin d'Auxerre," and the red wines of Bourgogne, Dauphiné, etc., with their deeper colour and fuller body.[2]

The Household Accounts, 1265, of Eleanor, Countess of Leicester,[3] sister of Henry III. and wife of the great Simon de Montfort, show clearly that the wine drunk in England during the thirteenth century came chiefly from Anjou, Poitou, Guyenne, Gascogne, and Auvergne. The trade marks also the great extent of the command which England had in France since the marriage of Henry II. in 1151, from Picardie to the Pyrenees. A good idea of the magnitude, in one direction only, of the commerce in French wine, is given by the numerous entries in the Public Records, both for the victualling from time to time of castles in the hands of the Crown, and for the provisioning of besieging forces under

[1] Claré was derived for *clarus*, referring to red wine of a clear or light tint—as it is spoken of in the *Dictionnaire de l'Academie*—"vin d'une couleur faible." Hence the substantive "clairé,"—"infusion des plantes odorantes dans du vin miellé et sucré." The word is also used in reference to a precious stone of a feeble colour, such as the pale examples of corundum, whether ruby or sapphire, and its varieties emerald, amethyst, and topaz.

René François, in his account of the coloured Murano glasses, says: "Car dans les verres jaunes le vin clairet s'y fait tout d'or;" this shows the lightness of its colour. See pp. 29, 286, footnote.

In the *Household Book of Henry Percy, Fifth Earl of Northumberland*, 1505-1520, p. 6, Edit. 1827, an entry occurs of "x ton ij hogisheds of Gascoigne wyne for the expenses of my house for an hole year, viz. iij ton of Rede wyne, v toun of Claret wyne, and ij ton and ij hogisheds of white wyne, after iiijl. xiijs. iiij. the ton." Thus claret is distinguished from red, and from white wine, being, in fact, *claré*. See also E. B. de Fonblanque, *Annals of the House of Percy*, ut sup. vol. ii. pp. 323-331.

There were several receipts for making Claretum. The following is given as an example:—"Ad faciendum Claretum. R nucem muscat. gariofil. cucubis. mac. cinamon. galangan. aq. contundatur, et in vino ponantur cum quarta parte mellis, et cola per pannum, &c."—MS. Sloan, Mus. Brit. 1869, fol. 14b.

A receipt for Piment is given in a MS. in the Bodleian, No. 761, fol. 86. Like Claré it was strained, and drunk fresh, or, in preference, set aside for use; thus Chaucer—

> Ne let therefore to drinke clarrie
> Or piment makid freshe and newe.

Bishop Beckington, who afterwards set his mark on the ecclesiastical buildings at Wells, had "pimento and waffers" given to him before leaving the Garonne for England, 1st January 1443, on his return from the very interesting but fruitless embassy for the negotiation of a marriage between Henry VI. and a daughter of the Count of Armagnac.—*A Journal*, etc., Edit. Nicholas Harris Nicolas, 1828.

[2] See p. 316. The claim which has been set up for an obscure village named Clairette, said to be in the south of France, and to have given the name to the wine, is quite untenable.

[3] This volume of uncommon interest was dedicated and presented to the Roxburgh Club by the distinguished bibliophile, Beriah Botfield, 1841.

notable circumstances, such as the second siege of Bedford Castle in 1224; and that military operation, more famous still, and far-reaching in its profound results, the siege of Kenilworth in 1265—also conducted by Henry III. in person, and the opening of an historical vista of surpassing national interest. The same public documents abound with references to the culture of the vine, and the manufacture of wine in this country. The accounts of the keeper of the Windsor vineyard, for instance, in the time of Edward III., give full descriptions of every operation of wine-growing; the vineyard was for some time under the direction of Étienne de Bordeaux. Wine continued to be made in England up to about the middle of the fifteenth century, but its quality must always have been inferior to that from France, even of the worst kind. Naturally verjuice was readily produced for culinary uses.

It is certain that the bulk of the wine imported from France in the time of Henry III., and for nearly three centuries after, arrived very immature, rough, and hard, and far removed in character from the Bordeaux and Burgundy of the present day, brought as they have been to the utmost limit of perfection. Accounts have come down from the Middle Ages of the wretched character of the wine distributed in *liveries*, and in the hall, even in royal households; much of it, however, was translated here into the popular concoctions Clarete and Pyment, and into spurious Bastard, not infrequently helped by boiling, called in later times "sodde wyne"—the *vinum coctum* of the ancients. The best French wine, pure and generous, was similarly sacrificed.

Of saccharine wines the two principal were Bastard, a natural sweet wine from Spain, tawny or brown,[1] and made from raisins or grapes left to shrink on the vines. It was "apparelled" in various ways in England, as were also all the French wines. The two sorts of Rhenish, known in the seventeenth century as "Elstertune" and "Barabant," were similarly treated; neither of them were thought much of by Markham,[2] though Howell, writing in 1634, and Butler, in *Hudibras*, speak well of the latter under the name of "Backrack"; the character of this wine is fully sustained at the present day in the district of Bacharach in the Rheingau. The other chief sweet wine was Malvoisey, also called in later times Malmsey; this, originally from Candia, but the name said to be derived from Malvesia in Greece, came chiefly in the Middle Ages from islands of the Grecian Archipelago, and from Italy. The mixture of Bastard and Malmsey produced true Muscadine, but of which there were many qualities

[1] "Why, then, your brown bastard is your only drink."—*The First Part of King Henry IV.*, Act II., Sc. iv., l. 70, Cambridge Edit. vol. iv., 1864.

[2] Markham, *ut sup.* p. 117.

as well as imitations. All these wines were liable to be flavoured with spices and herbs; "parelled" with eggs, milk, bay-salt and conduit water; helped with honey, boiled with white wine, if they became "eager," that is *aigre*, and mixed or refreshed with sack.[1] There could have been no question of refinement of palate with regard to them.

In the "Squyr of Low Degree," written in the time of Edward II., the daughter of the King of Hungary, consumed with a hopeless love, is promised, among other pleasures and remedies for the dispersion of her melancholy:—

> You shall have rumney and malmesyne,
> Both ypocrasse and vernage wine;
> Mount rose, and wyne of Greke,
> Both algrade, and respice eke,
> Antioche, and basturde,
> Pyment also and garnarde;
> Wyne of Greke, and muscadell,
> Both clare, pyment, and Rochelle,
> The rede your stomach to defy,
> And pots of Osy set you by.[2]

A better list of wines in use at the time in England could not be compiled.

The partiality of the English in the Middle Ages for a great variety of strong spices and stimulating aromatics in their cookery was extended, as has been intimated, to their drinks, and led to the manufacture of a large number of sweetened liqueurs and cordials, in which such spices as cinnamon, mace, cloves, galingal, nutmeg, carraways, coriander, aniseed, ginger, and pepper were infused or steeped, often all at once. The wines, particularly the sacks, were frequently burnt, as well as thickened by boiling, "sodde wyne," and sweetened with honey, to meet this depraved taste. Thus was compounded hippocras, and "vinum gariofilatum,"—wine boiled with cloves, styled by Henry III. "potus delicatus";[3] and in this way Bastard, Algrade, and Granarde, all Spanish sweet wines, as well as Malvoisey, and the blend called Muscadine, were spiced and disguised until their original characteristics were quite overpowered. In addition to the

[1] Markham, *ut sup.* p. 113.

[2] Line 753.

[3] De potibus delicatis ad opus regis faciendis. Mandatum est custodibus vinorum regis Winton. quod de vinis regis quae habent in custodia sua, liberent Roberto de Monte Pessulano tanta et talia, qualia et quanta capere voluerit, ad potus regis pretiosos delicatos inde faciendos. Teste rege apud Lutegareshall xvi die Novembr.—*Close Roll*, 34 Henry III. m. 19.

Mandatum est custodibus vinorum regis de Ebor. quod de melioribus vinis regis quae sunt in custodia sua faciant habere Roberto de Monte Pessulano dua dolia albi vini ad claretum inde faciend. ad opus regis contra instans festum Nativitatis Dominicae. Et mandatum est Rob. de Monte Pessulano quod festinanter accedat ad Ebor. et garhiofilac. et claret. predict. faciat sicut annis preteritis facere consuevit.—*Close Roll*, 36 Henry III. m. 31.

infused condiments, further spices from a silver plate were distributed with the wine at the table, and any "sève" or "bouquet" which it may have chanced to possess must have been completely ruined. The proceeding is thus alluded to in a metrical tale of the end of the fourteenth century:—

> Faun were speceli spices spended al a boute,
> Fulsumli at the ful to eche freke ther wine,
> And the wines ther with that hem best liked.

With even a moderate number of wines, and such a variety of spices, it will be at once realised how many different sorts of mordant and unwholesome liqueur-like mixtures could be compounded or concocted, but with none of the subtlety of their modern representatives. "Ypocrasse," and particularly "basturde," were often used as generic terms, including a multitude of nectarious compounds, though several special receipts are given for hippocras proper. Honey, which formed the principal sweetening and thickening agent, and was far superior for the purpose than sugar or "blanche powdre"—as is recognised at the present day in the constituents of "Athole Brose"—must have been very plentiful in the Middle Ages; for instance, 263 gallons were bought for the King in 1338, and in 1370 seven casks of it were supplied to Windsor Castle.[1]

It appears that some of the thin light-tinted clarets, such as those of Rochelle, described in the early part of the seventeenth century as "very small hedge wines, sharp in taste and of a pallid complexion,"[2] and the light red *quasi*-white wine of Anjou, were included in the general term "white wine," as well as some of the paler sorts of the "High Country wine," as it was called, from the Medoc country immediately north of Bordeaux. The colour and character of wine in a particular district at the present day is no criterion of its appearance two or more centuries ago.[3]

[1] This recalls the great quantity of bee's-wax that was continuously consumed by the Great or Broad Seal of England, whether of Absence or Presence, and the countless multitude of ecclesiastical and little personal seals attached to documents. To these constant requisitions throughout the kingdom must be added those of the embalmers, for cerecloth, the taper makers, the devisors of the "lively effigies," and the makers of the cast wax decorations of the temporary herses. Notable examples of the latter were set up in four different churches to receive the corpse of Anne of Bohemia on its stately progress from Wandsworth to Westminster in 1394, and for which ceremonial $4\frac{1}{2}$ tons of wax were used, including that of the white virgin kind for tapers at the dirige and masses.

[2] Markham, *ut sup.* p. 118.

[3] The colour of wine depends not upon that of the grapes, but upon the amount of colouring principle contained in their skins, and dissolved by the alcohol generated in fermentation. The sooner the skins are withdrawn the less colour the wine will have. For instance, champagne is made from red grapes, and sherry from red and white grapes indiscriminately. The deep colour of Alicant, now known as Tent—*Tinto*—implying any dark Spanish wine, was caused by the peculiarity of the Tintilla grape, which, like the Morello cherry, is entirely penetrated by the colouring principle.

The introduction into England of the process of distilling spirits, and the slowly awakening taste for such liqueurs as tinted usquebagh, "Imperial Water," "rosa solis," and "aqua vitae," gradually drove out the vicious and indigestible mixtures that had been so long and so highly esteemed. But there was a transition. The mixtures, infusions, or decoctions were now to be operated upon by scientific distillation. That is to say, that wine mixed or infused as before, with a variety of spices and herbs, was distilled with an alembic or limbeck. Thus the famous Imperial Water was obtained from Gascony wine, in which different proportions of the following spices and herbs, brayed in a mortar, had been suffered to steep for twelve hours:—Ginger, galingal, nutmeg, cloves, aniseed, fennel seed, carraways, sage, mint, red roses, thyme, pellitory, rosemary, wild thyme, camomile, and lavender. Aqua vitae of one kind was obtained from twenty herbs, four spices, and a foundation of strong ale with a fourth part of sack lees; another sort was distilled from a variety of spices and herbs and a basis of red wine; and aqua composita from strong ale with a number of herbs, licoras, and aniseed in it.[1] Such complex decoctions must have been very trying in their use. The art of distillation is comprised under three principal heads:—1, That of extracting spirit from fruit, grain, seeds, sugar, etc.; 2, that of extracting simple waters from plants, flowers, etc.; and 3, that of extracting compound waters, and cordials, from fruit, grain, spices, plants, flowers, etc., with the assistance of a rectified spirit.[2]

Agnes, Dame Hungerford, in her Inventory of 1523, had a press full of glasses with "waters" in them; whether ardent or aromatic we cannot tell, but probably the former. There are many records in Privy Purse Expenses, and in Household Accounts of the early part of the century, of rose water—of which there are numerous entries in the Privy Purse Expenses of the Princess Mary[3]—and other aromatics, showing that such distillation was also carried on to a considerable extent long after that of ardent waters was introduced. Mrs. More of Losely had, in 1556, "a lyttle glasse for aqua composita."[4] In the Household Books of Lord William Howard,[5] under the year 1618, the entries occur: "A bottle of aqua vitae, ijs.; 2 bottles of aqua vitae, iijs. xd." This is an early mention of the spirit. There are further notices of the purchase of aqua vitae in small quantities in 1620, and in 1629 one bottle of "strong water" was bought. Between the two latter dates, namely in 1621, "stilling glasses" had been

[1] Markham, *ut sup.* pp. 102-104.

[2] See A. Cooper, *The Complete Distiller*, etc., edit. 1758.

[3] Appendix, Inventories, No. II.

[4] See p. 143.

[5] See p. 204.

obtained and aqua vitae distilled at Naworth Castle. In 1624 Sir William Fairfax had "in the Still House" at Walton four stills and a quantity of "glasses with distilled waters." These were doubtless ardent spirits obtained from various wines. This subject has already been regarded from a different point of view, and need not be further pursued here.[1]

Returning now to the wines, allusion has been made to the sweet wines of Spain. As to the dry wine—the "Xeres sec"—the "sherris-sack" and "fertile sherris" of Falstaff,[2] it did not appear in England until the sixteenth century. It is not spoken of in the Household Book of Edward Stafford, Duke of Buckingham, giving the accounts of his expenses from 5th November 1508 to 22nd March 1509.[3] The choicest wines in the great and hospitable establishment at Thornbury Castle were Ossey, that is wine of Alsace, and Malvoisey; the others, so freely dispensed in the hall, and as liveries, being Gascony and a much less quantity of Rhenish, but equal to double that of Malvoisey. Howell says that in the time of Henry VII. "no sweet wines were brought into this realm but Malmsyes," and that "no sacks were sold but Rumney, and that for medecine more than for drink."[4]

An early mention of "Xeres sec" in its potable office occurs in the Lestrange Accounts[5] in 1534, under which year a pint of it is entered as "cherys," and it occurs in the same documents in 1547, 1549, and 1578 as "sacke." James V. of Scotland in 1538-39[6] had sack under the name of "Romanye," that is Rumney;[7] and in Archbishop Parker's Inventory of 1577[8] a "Butt of sacke" is mentioned, showing that its importation for table drinking was then well established.

The first employment of "sherris-sack" in England, in its natural condition, being almost confined to medicinal purposes, soon led to its being sweetened for such uses and to its adoption as an agreeable beverage. It was, in fact, treated much as the older Bastard. Then, quite early in the seventeenth century, a much stronger sweet wine was imported from the Canaries, and called canary sack, apparently from its resemblance to the far inferior sweetened Spanish "sec"; at the same time was introduced the sweet wine of Malaga mixed with Xeres, and claiming in its turn to be canary sack. On this point Howell, writing in

[1] See p. 315.

[2] *The Second Part of King Henry IV.*, Act IV., Sc. iii., ll. 92, 114, Edit. *ut sup.*

[3] *Archaeologia*, vol. xxv. p. 315.

[4] *Londinopolis*, pp. 102, 103.

[5] *Archaeologia*, vol. xxv. p. 411.

[6] *Ibid.*, vol. xxii. p. 1, "Observations upon a Household Book," etc.

[7] The modern Burgundy growth of the present day, Romanée, is a coincidence of name. Rumney appears to have been a sweetened sack from Languedoc.

[8] *Archaeologia*, vol. xxx. p. 23.

1634 to Lord Clifford, says, speaking of canary, of which wine he had the highest opinion, "I think there's more Canary brought into England than to all the world besides. I think, also, there is a hundred times more drunk under the name of Canary wine than there is brought in; for sherries and malagas, well mingled, pass for canaries in most taverns, more often than Canary itself; else I do not see how 'twere possible for the vintner to save by it, or to live by his calling, unless he were permitted sometimes to be a brewer. When sacks and canaries were brought in first among us, they were used to be drunk in aqua vitae measures, . . . but now they go down every one's throat, both young and old, like milk."[1]

The first entries of "sack" or "seck" in the Household Books of Lord William Howard[2] occur under 1618, when four gallons of it were procured; small quantities and a butt of sack were bought in the following year, and the entry also occurs of three quarts of "Canary wine"; this was tentative. In 1620-21 a small measure of "Malligo" was obtained, and about forty more gallons of sack. Between 1618 and 1625 Muscadine and white wine were bought in moderate amounts, but claret during the same period, and up to 1633, in such large measures as rundlets, tierces, hogsheads, and tuns. Only one small quantity of "Aligant" was bought—five pints, in 1621. The purchase of Muscadine ceases altogether in 1621, save on one other occasion, in 1633. White wine lingered until 1634. In 1624 began the regular purchase at Naworth Castle of sack and canary sack,[3] in various numbers of gallons, and increasing from time to time to rundlets, pipes, and hogsheads, a pipe of sack being procured in 1632, two rundlets of it in 1634, and about two years later two hogsheads. At this date, where the accounts leave off, the three final entries give of claret and sack then bought as four and two hogsheads respectively, and one hogshead of white wine.

In "Le Livre des Acconts" of Sir John Francklyn of 1624,[4] a quart of canary sack occurs, and the same quantity of epicrist, *i.e.* hippocras, even then rather an old-fashioned drink. He also bought "white wine and sugar," signifying that, like Falstaff, he drank sugar with his wine;[5] it was then the common practice, hence the stout knight's exclamation that, "If sack and sugar be a fault, God

[1] *Discourse to Lord Clifford*, ut sup., 7th Oct. 1634.

[2] *Surtees Society*, vol. lxviij., 1877.

[3] Howell says, in his *Discourse to Lord Clifford*, that "from Bachrag (in the Prolts or Lower Palatinate) the first stock of vines which grow now in the grand Canary Island were brought." He states that the Canary wines "are accounted the richest, the most firm, the best bodied, and lastingst wine, and the most defecated from all earthly grossness, of any other whatsoever."

[4] *Archaeologia*, vol. xv. p. 157.

[5] An old Shropshire song referring to a serving man's advance in life alludes to his drinking "sugar with his wine" in the days of his prosperity.

help the wicked!" With some misgivings as to his "vowes," Pepys drank hippocras at the Guildhall, 29th October 1663, it being in his convenient judgment "only a mixed compound drink and not wine." It was, in fact, wine sweetened with honey, and may have been either burnt or "sodde," and was quite outside a vow of abstinence.

The following list, drawn from Household Accounts and other documents, show the wines in use in England under their general or special names during the sixteenth and seventeenth centuries:—

1507. Edward Stafford, Duke of Buckingham, Household Book.
Gascony, Rhenish, Malvoisey, Ossey.

1516-1517. Earl of Shrewsbury, Letters to.
Claret, Red wyne, Whit wyne, Freche wyne, New Gascon wyne, Wyne of Graves, Frenche White wyne, Olde Frenche wyne, of Byon, Rynishe wyne, Muscadyne.[1]

1519-1578. The Lestranges of Hunstanton, Household Accounts.
Rynnyshe, Claryett (Clarett), Maumsey (Malvesey, Malmesey), Bastard, Cherys, Sacke.

1528. Henry VIII., Royal Rolls.
White wine, Claret, Wines of Surk, Wines of Gravys, Red wine. (All bought at Bordeaux.)[2] White wine of Galiake was bought in 1530. (Gaillac is a town in Languedoc celebrated for its wines.)

1538-1539. James V. of Scotland, Household Book.
Claret, Romanye, Malmesy, Rhenish, Aligant, White wine of Anjou.

1572. Thomas Kitson, Household Accounts.
Muscedell, Malmesey, Sack, Rhenish.[3]

1577. Archbishop Parker, Inventory.
Gascogne, Sacke.

1612-1635. Lord William Howard, Household Books.
Muscadine (Muscatt), Claret, Seck (Sack), White, Canary, Malligo, Aligant, Canarye Sacke.

1624. Sir John Francklyn, Account Book.
Canary Sacke, White wine, Epicrist.

A list extracted from the Calendars of State Papers between 1618 and 1667 gives the names of the following wines imported:—

1618. Rhenish, Gascony, Spanish, Sweet Spanish.
1623-1625. Bourdeaux, Cognac, French, Malaga, Nantes, Rhenish, Sweet.
1628. Deale or Rhenish.
1631-1663. Alicant, Canary, French, Muscadel, Rochelle, Sack, Rhenish.
1667. Bayonne, Bordeaux, Canary, Claret, French, Malaga, Rhenish, Sack, Spanish.

From the Renishaw Household Books we have:—

1678-1682. Claret, Canary, White, Rhenish, Sack, Old Claritt.[4]

[1] Lodge, *Illustrations*, vol. i. p. 17.

[2] Royal Rolls, 14 B. XXIX. Madden, *Privy Purse Expenses of the Princess Mary*, p. 274.

[3] Gage, *History and Antiquities of Hengrave*, p. 193.

[4] The limited number of the names under

It will not be necessary to trace in any detail the progress of sack in public esteem in England down to modern times. The documents speak for themselves, and the well-deserved popularity of "sherris-sack" is further borne out by the literature of the eighteenth century, not to mention the somewhat scarce Lambeth tin-glazed earthenware pots inscribed, usually in blue, for "sack," as well as for "whit" and "claret," and of which dated examples range between 1640 and 1672. These vessels served the same purpose at the table as modern decanters, and their use in this way must have continued long after their manufacture ceased. They were filled from the wine in bulk, and not from the wicker-covered bottles; systematic bottling of wine and laying it down for keeping had not yet been introduced. But at least from before the middle of the sixteenth century it was the custom in all wine-growing regions to cover bottles with wicker-work of various kinds, for filling at the casks for use at the table, and for exportation of the better kinds of wine, as well as Spa Water, to other countries. Victor Gay quotes, relative to a banquet of Catherine de Médecis in 1549,—"six douzaines et demi de bouteilles de verre couvertes d'osier, esquelles estoit le vin de table."[1] The Renishaw Household Books give numerous instances of wines—sack, claret, rhenish, white, and canary, bought in bottle, and their prices during the second half of the seventeenth century. The thick *bouteil*-shaped dark green or "black" bottles, often stamped or sealed with arms, names, and dates, were also used for common table and tavern purposes, and for supplying requirements of private houses "without doors," a system to which Pepys—who had bottles stamped with his crest, 23rd October 1663—often alludes; such bottles are shown in Hogarth's pictures of *The Election* and *The Rake's Progress* in the Soane Museum. Mr. Povey, an advanced epicure, and friend of Pepys, showed him bottles of all sorts of wine with labels pasted on them, 19th January 1663.

It may be recalled that in 1668, when Greene specified some of the best of the glasses ordered from Venice, he named those in "clouded calsedonia" and "speckled enameld" to be for sack. He ordered 80 dozen sack glasses in 1669, and 110 dozen in 1671; the quantity averaging only a third less than those for claret during the same years, which latter wine had been freely drunk in England centuries before "Xeres sec" had been heard of. Thus the glasses support the documents in showing how extensively Spanish dry wine had come into fashion in something less than a hundred and fifty years, though French

which the wines are spoken of in the above list make it difficult to believe that so many as fifty-six different kinds of French wines, and thirty-six of other sorts were imported into England in the time of Elizabeth.—See *Pictorial History of England*, vol. ii. p. 883, 1839.

[1] *Glossarie d'Archéologie*, ut sup., "Bouteilles," vol. j. p. 202.

wines were not yet much shaken in public esteem. The blow which caused them to fall was yet to come, and from another and an unexpected direction.

Howell, in his letter of 7th October 1634 to Lord Clifford, speaking of the Spanish wine Alicant, says: "Now as in Spain, so in all other wine countries, one cannot pass a day's journey but he will find a differing race of wine; those kinds that our merchants carry over are those only that grow upon the sea-side, as malagas, sherris, tents, and alicants: of this last there's little comes over right; therefore the vintners make tent (which is a name for all wines in Spain, except white) to supply the place of it.[1] There is a gentle kind of white wine grows among the mountains of Gallicia, but not of body enough to bear the sea, called Ribadavia. Portugal affords no wines worth the transporting." Thus Alicant, which, as we have seen, James V. of Scotland was content to drink pure in 1538, was blended, fabricated, and transformed later on into tent—*tinto*, and was long the nearest approach to "Port" which came into England. It does not appear that the best wine then made in Spain—that of San Martin de Valdeiglesias, near Madrid—was exported. Andreas Baccius[2] writes of it as incomparable. But the vintages of the Valencian and Catalonian Rivieras—of which Alicante, Tarragona, and Barcelona were the principal ancient centres—heady and rasping though they were, continued to find favour in England in the old hard-drinking days. It will be remembered that in Farquhar's *Recruiting Officer*, written in 1706, Worthy offers to pierce a pipe of choice Barcelona for Captain Plume. As a matter of fact, no wine was imported here from Portugal until the reign of Charles II., and in all probability not in any quantity, or of good character, before 1672, or special glasses would have been alluded to for it in the orders from Venice by Greene of that year —the latest communication of the kind we have from him. The marriage of Charles II. with Catherine of Braganza in 1662 no doubt led to attention being directed to whatever merit Portuguese wine may have then had; but it is not spoken of by Pepys in his Diary, which ends 31st May 1669. He refers to tent in his cellar, 7th July 1665.

The mention by Howell of the white wine of Ribadavia—probably a species of white port, brings us almost on to the ground. Baccius speaks of it as pure, but grateful considering its mediocrity,—"unde nauigationis impatiens est."[3] Ribadavia is a small inland town on the Minho river, ten miles from the northernmost point of Portugal, in the Spanish frontier province of Galicia, adjoining that of the Upper Douro, the port wine district of Portugal. Baccius says that

[1] George Sitwell, a merchant in Spain, sent his father two barrels of Tent to Renishaw in 1664.

[2] Andreas Baccius, *De Naturali Vinorum Historia*, etc., p. 362, Edit. 1596.

[3] *Ibid.*, p. 364.

Lusitania yields to no country in its fruitfulness of generous wines, of which it sends vast supplies to the East and to the New World, receiving spices, etc., in return.[1]

A great improvement must have taken place after 1634 in the wine of the Upper Douro, and this is indicated by the fact that in 1669 the duties had come to be identical on the wines of France and of Portugal. In 1693, and again in 1697, higher rates were levied upon French wine, at which latter date these duties were at the rate of 4s. 0½d. a gallon, against 1s. 8d. for the wine of Portugal. Under these fiscal conditions the imports from Oporto and Lisbon rapidly increased; the manufacture of the wine was vastly amended, and it was allowed to mature in the wood; but it was flavoured, and loaded, and although its natural character was quite altered, the English taste entirely changed in favour of it, as against the pure and noble wines of France which had been paramount in England since Anglo-Saxon times, and were now at last deposed. The curious point in the national change of taste is that it was brought about by a wine specially prepared for the English market; the natural flavour of the vintages of the Upper Douro would not have suited the British palate at all.

In 1703 the famous Port Wine Treaty was negotiated by Mr. Methuen between England and Portugal. Its chief features were the admittance into England of Portuguese wine at a duty of one-third less than on those of France, Portugal receiving English manufactured woollen goods at one-half less duty than was levied upon the manufactures of other countries. The results of the Treaty were so signal that from 1707 to 1779 the proportions of French and Portuguese wines imported into England were 5 per cent of the former, and 95 per cent of the latter. In 1784 the proportions were—for Portugal 80 per cent, and 20 per cent for all other wines, and they continued much the same until the end of the eighteenth century. Naturally, after the signing of the Treaty of 1703—as with all monopolies—the quality of the wine affected did not tend to improve, and prices rose, particularly after the establishment of the Oporto Wine Company in 1754. The greatest consumption of port in England was during the quinquennial period 1825-1829.

In the meantime the importation of French wine into Scotland and Ireland greatly increased, for neither were touched by the Port Wine Treaty until after the respective Unions of 1707 and 1800, nor did either nation welcome port with the ardour of the English. Indeed, if a well-known couplet could be taken seriously, it was as "poison" to the stern Caledonian. Many and cordial are the allusions to

[1] Andreas Baccius, *ut sup.* p. 368.

the plenty, cheapness, and goodness of claret in Scotland throughout the century, in which the Border counties also benefited. For instance, William Bradford, writing from Rose Castle to Samuel Kerrich in 1719, says: "We have excellent French wine, plenty, and very cheap, and good brandy;"[1] and as to Ireland, both Pope and Bolingbroke wrote to the Dean of St. Patrick's in his exile, congratulating him on living in a country where French wines remained cheap, and had not been undermined by port.

We have seen that no mention is made by Greene of special glasses for Portuguese wine, and it would appear from the dates of the duties that port advanced generally into favour between 1670 and 1690. From the Renishaw papers we gather that in 1701 "3 Quarts of red port" were bought by George Sitwell for 4s. 6d. William Sacheverell paid for red port and Lisbon at an inn in 1708, and in 1714 for various "parcells" of Lisbon, amounting to £7:9:6; and in 1718 George Sitwell again bought red port. In 1730 Francis Sitwell procured twelve gallons of "red poart," and in the following year a pipe of the same wine, and another in 1737. Thirty years later Francis Hurt, afterwards Sitwell, of Renishaw, bought port and "mountain,"—which presumably at that time came from the mountains which divide Galicia from Portugal; and in 1773 and 1774 "white port," doubtless made from white grapes only, red port, mountain, and a wine called "Caliavela," probably the name of a small place in the north of Portugal. At the extreme end of the century the Renishaw wine bills include pipes of old red port and red port, varying in price from £59 in 1795 to £105 in 1807.[2]

As to the early use of port in taverns a few instances will suffice. It was evidently well established in England in 1712, for at the "Old Fleece" at Newcastle-on-Tyne the charges were for "Portugal wines neat and natural, as imported by Brooke and Hellier, 14d. per quart without doors, 16d. within;" and at the "Globe" in 1716 "Lisbon white wine"—probably white port—was 16d. a quart.[3] We have seen that William Bradford and his friends were accustomed to toast

[1] *Original Correspondence*, 1633-1828, *ut sup.* vol. xi. p. 118, in the possession of Albert Hartshorne.

[2] The author is indebted to Sir G. R. Sitwell for the above notes relative to port wine, kindly extracted by him from his remarkable accumulation of family letters, household books, bills, estate accounts, etc., which have not usually been preserved, and will in due time acquire high value as documentary evidence. They give a sufficient idea of what was going on generally throughout England with respect to wine from Portugal.

[3] J. Hodgson Hinde, *Public Amusements in Newcastle-on-Tyne*, p. 20.

A private letter from an officer quartered at Kilkenny in 1704 records: "We have good French claret at sixteenpence the quart." "Lisbon white wine and claret," and "Portugal wines neat and natural," were sold at the same price eight years later at Newcastle-on-Tyne.

"the fair Quaker" at the Bell Tavern "in excellent neat Port" in 1717. Strictly speaking, the expressions "neat" and "natural" were strangely applied to much of the wine then brought from Portugal, whose hold upon English taste—which had perhaps become a trifle blunted—was obtained by its having neither the one or the other quality. Assuredly this is said in no disparagement of the best examples of the matured and generous vintages of the Upper Douro, which have played so long and important a part in English social life, and acquired the well-deserved pre-eminence which they are not likely to lose.

APPENDIX.

ORIGINAL DOCUMENTS.

No. I.

LETTER FROM ARMIGILL WAADE TO CECIL (*State Papers, Domestic*, 1565).

(*Extract.*) No Doubt the man (Cornelius de Lannoy) ys at great charges, he thought he might have had his provisyons in England as in other places, but that will not be. All our glasse makers can not facyon him one glasse tho' he stoode by them to teach them. So as he ys now forced to send to Andwarp and into Hassia for new provisyons of glasses, his old being spent. The potters cannot make him one pot to content him. They know not howe to seasson their stuff to make the same to susteyne the force of his great fyers. The Spanyard would make me believe that Cor hath finished his bussynes already, the wich I suppose not to be true. Marry I do perceave he hath dyverse tymes occupyed his melting furnace, and alwayes in myne absence, he telleth me he hath made thessaye of certain ewres . . . he hath the scope of three yeares for this respect I would he wear putt in sume generall cumfort of some place to be provided for him here in England, he liketh marvelously well the syte of Guldeford.

No. II.

PATENT ROLL OF ELIZ., p. 11, memb. 4. 33 (8th Sept. 1567).

De concessio pro J. Carr et aliis.

Elizabeth by the grace of God &c. To all men to whome theise presentes shall come greatinge Whereas Anthony Beccku alias Dolyn and John Carr borne in the Lowe countries vnder the domynion of oure deare brother Phillippe Kinge of Spayne have made vnto vs moste humble sute and petityon aswel that we woulde graunte vnto them priveledge and licence to exercyse put vre (? use) and practyse within this oure realme of England the arte feate or Mysterie of makinge of glas for glasinge such as is made in ffraunce Lorayne and Burgondy as also that we woulde make a straight Inhibithion and sp̃eall restraynte that none other parson or parsons shall or maye withoute theire license or assente exercyse the same arte feate or Misterie within oure saide realme of England or other oure domynions duringe the space of twentie one yeares nowe nexte ensuynge And in consideracyon thereof the saide Anthony Becku and John Carr have promysed and vndertaken to make within oure said realme of England as muche of the saide glasse for glasinge as shall suffise and serve to be occupied and employed within oure saide realme and all other domynions and to sell the same glasse to oure sobjectes as cheape or better cheape then the like glass made in foren partes have vsuallie

bene or hereafter shalbe soulde within this oure realme of England And also to teatche Englishe men oure subjectes the same scyence or arte of glas makinge parfectlie and effectuallie so as the same scyence or arte after the ende of xxj yeares maye be perfectually and substancyally vsed and practysed by englishe men Knowe ye that we to theire saide peticyons beinge favorablie enclyned and for the consideracõn aforesaide tenderinge the good and advauncement of the comon Welthe of oure realme and domynions and respectinge the greate cõmoditie and profiet whiche thereby to the same maye ensue have geaven and graunted and by theise presentes of oure sp̃eciall grace certeyne knowledge and mere mocyon for us oure heires and successors do geve and graunte to the saide Anthony Becku alias Dolyn and John Carr and to eyther of them and to theire executors admynistrators and assignes and to the executors admynistrators and assignes of either of them full and free libertie license power and auctoritie that theie and everie of them by them selves and by the deputies factors servauntes & workemen of them and everie of them shall and maye at all tyme and tymes duringe the saide terme of one and twentie yeares next ensuinge after the date of theise presentes within this our said realme of England and everie part of the same at the libertie and pleasure of them and everie of them and in aney or everie suche place within this oure saide realme of England as they or everie of them shall thinke meete for their purpose and can therefore compounde and agre with the owners of the same places or such as have interest therein as well erect make and builde fournaces howses buildinges and other engins and Instrumentes mete and necessaire to and for the meltinge and makinge of the saide glas mete for glasinge as above is saide as also use exercyse practise and put in worke or vse or cause to be used practised exercised and put in worke or vse the said arte feate or misterie of making of suche glas for glasinge as is or hathe bene made in ffraunce Lorayne and Burgondy or in aney of them without aney lett Interruption or impediment of vs oure heires or successors or of aney of our Ministers officers bodies politicque or corporate Artiffecers subjectes or other persons whatsoever And further we will and for vs oure heires and successors straightlie chardge and enjoyne and comaunde that no person or persons oure naturall subjectes or borne in foreyne partes of whatsoever state or condicion or degree he or they be other then the said Anthony Becku alias Dolyn and John Carr or eyther of them or the executors administrators or assignes of them or of eyther of them or suche as shall sett on worke or licenzed by them or by aney of them shall and maie duringe the saide terme of one and twentie yeares and the continewaunce of this present graunte and privelege practise exercyse or by aney meanes directlie or indirectlie vse put in worke or vse within oure saide realme or aney other oure domynions the saide feate arte or Mysterie of makinge of such glas before mencyoned or shall make aney of the saide glas before mencyoned within this oure realme or aney other of oure domynions vppon payne that whosoever contrarie to the tenor and purporte of theise oure Letters pattentes after the true meaninge of the same shal duringe the saide terme of one and twentie yeares and the continewaunce of this present graunte or priveledge practise exercise or sett in worke the saide arte feate or Mysterie of makinge of suche glas or shall make aney of the said glas before mencyoned within this oure saide realme of England or within aney other oure domynions shall for everie tyme of there so doinge forfeicte and loose to vs oure heires and successors bothe the glas whiche so by them shal be wroughte and made and all the vtensils matter and Instrumentes that theie or aney of them shall therein or there aboute employe or vse togidre withe the some of one Hundereth poundes of good and lawfull money of England to be levied to the vse of vs our heires and successors. Wherefore we chardge and comaunde all and singular Mayors Shriffes Bayliffes officers Mynisters Wardens Artificers and Subjectes to whome in this case it shall appertayne

that theie and eurie of them be aydinge helpinge and assistinge to the saide Anthony Becku alias Dolyn and John Carr and to eyther of them and to the executors admynistrators assignes deputies servauntes and workemen of eyther of them duringe the saide terme of one and twenty [yeares] and the continewaunce of this present graunte and priveledge in all reasonable and lawfull thinges wherein theie shall have neede of theire helpe and assistaunce touchinge the accomplishement of the effecte of theise oure letters patentes or of aney parte or parcell thereof as they and everie of them tender oure pleasure and will avoide oure indignacyon and aunswer for the contrarie at theise ottermoste perilles provided alwaies that the said Anthoney Becku alias Dolyn and John Carr and eyther of them and the executors administrators and assignes of them and of eyther of them shall well and truelie aunswere and paye or cause to be aunswered and payde at all and euerie tyme and tymes and from tyme to tyme during the saide terme of one and twentie yeres to vs oure heires and successors for all such glas as they or eyther of them or the executors admynistrators or assignes of them or of eyther of them shall make or cause to be made within this oure Realme from tyme to tyme duringe the said terme by vertue of this priveledge or graunte suche and so greate somes of lawful money of England as at this present be or heretofore have aunswered and payde and oughte to be aunswered and paide to oure vse by aney marchauntes strangers for aney suche kynde and quantitie of glasse before mencyoned conveyed transported and brought from aney the partes beyond the seas into this oure saide realme of England or other oure domynions provided also that the saide Anthoney Becku alias Dolyn and John Carr and eyther of them and the executors administrators and assignes of them and of eyther of them shall from tyme to tyme and at all tymes duringe the said terme of one and twentie yeares yeld & render true juste and faythful accompte to such person and persons as duringe the saide terme shalbe by vs oure heires or successors therefore sufficientlie deputed assigned or appoynted at all such tymes and from tyme to tyme duringe the saide terme of one and twentie yeares be it quarterlie half yearlie or yearlie as the saide person or persons shall require the same of all soche nomber and quantitie of all soche glasse as theie shall have made or caused to be made or wroughte within oure saide realme at aney tyme or tymes duringe the saide terme of one and twentie yeares provided also that yf the saide Anthony Becku alias Dolyn and John Carr or the executors admynistrators or assignes of them or of either of them shal not or doe not sett vp before the feaste of the Nativitie of our lord christe whiche shal be in the yeare of oure Lorde A thousand fyve hundred sixtey and eight make or cause to be made within oure saide realme of England suche manner of glas as is before mencyoned or before the saide feaste shal not or do not sett vpp make and fullie and perfectlie furnishe within oure saide realme two full sufficient and mete furnaces for the perfecte makinge of the same glas or before the saide feaste shall not continewe and keape the same two furnaces in workinge effectuallie withoute fraude or covyn that then and from thenceforth theise oure letters patentes and everie Article therein conteyned shalbe vtterlie voide and frustrate Aney thinge herein before conteyned to the contrarie in aney wise notwithstandinge provided also that the saide Anthony Becku alias Dolyn and John Carr or eyther of them or the executors admynistrators or assignes of them or eyther of them shall within by and duringe the saide terme of one and twentie yeares instructe effectuallie teache and make manifeste the arte feate and Mysterie of the perfecte makinge of suche glas as is before mencyoned vnto a convenient nomber of Englishe men as shalbe according used [? according to use] in the Citie of London be bounde to serve them or aney of them as there apprentices and shall endevor them selves to the vttermoste of there connynge skill and knowledge to make the saide Englishemen in everie condicyon and poynte so skilfull

and perfecte therein as that the saide English men may be able after the saide terme of one and twentie yeares by them selves effectuallie to practyse put in vse and performe the saide arte feate and Mysterye and to make as good glass and in such manner and forme to all respectes as the saide Anthony and John or eyther of them or the executors administrators or assignes of them or of eyther [of them] shall make or cause to be made duringe the saide terme to the intent that the same Scyence arte and knowledge of the perfect and effectuall makinge of suche glas as is aforesaide maie continewallie after the saide terme of one and twentie yeares expired remayne in this oure realme and be from thenceforthe for ever practysed and put in worke and vse by oure saide subjectes ffor the whiche purpose the saide Anthony and John and eyther of them and the executors admynistrators and assignes of eyther of them shall have by vertue of theise oure Letters patentes license to take aney nomber of oure subjectes as prentyzes to learne the saide arte as above is saide not withstandinge aney lawe or custome to the contrarye In wittnes whereof etc. Teste ℞ apud Gorhamburie VIII° die Septembr̃

per breve de privato Sigillo.

No. III.

Letter from Anthony Becku, *alias* Dolin, to Cecil (Lansdowne MS. No. 76, 1568).

To the right honorable Sir William Cecill Knight the Quenes majesties principall Secretary, &c.

Right honorable for that I vnderstand that ther is some lack found that the making of the glass dothe not better proceade for the speciall dewty I owe vnto the Quenes majestie and the greate fault ther is in dede happened in this entreprise I am bounde to confes a greate hinderaunce to be doune vnto her majestie and vnto the commodities of this Realme, and that your honour maye knowe the occasions therof, for my dewty sake, I have drawne out the same as briefly as I can as foloweth.

ffirst John Carré my co-partener did procure out of Loraine workemen for to make that kind of glass and agreed with some of them in his owne proper name, for the one half, and in the name of one John Chevallier for the other half, who hathe no privilege in the glass-making, which being so done gaue me suspicion of double dealing, considering that we were in company to gether, and did not nominate me in the said contracte as by the copie of the said contract dothe appere which herevnto is annexed.

fforgetting the said collusion and passing over the same for the best, I procured as muche as was in me to gett thes workmen to labor, which were come hither for the said purpose, and for the better to bring the same to passe (as I thought) I did vtter my mynd vnto one Peter Briet desiring hime to be a mediatour betwene the workemen and vs for the making of the glass, for that I not being named in the contracte with John Carre, I coulde not compell them, but was forced to intreate them. After diuers meatinges did breake of and nothing coulde be done, so that all the charge for making of a fornes and other excessive expenses were holly loste of the which I have good occasion to be right sorry, and maye lament my case in the desiring of Peter Brietts assistaunce, for instede where he should haue persuaded them to worke in this Realme, contrary vnto the same did contracte with the said workemen to sett vp on the other side of the see by Bullen a certeine forneys, saing it was night vnto England and should be as commodious there as in the

Realme and so do ther feate without priuilege, and besides should kepe the science out of the Realme, for they wolde in no wise haue the science to come into England.

ffinding my self thus deceaued my chargis and tyme loste and also destitute of helpe haue neuerthelesse for the better fourthering of the making of this glass, and for the establishing of the science of the glass making in this Realme, taken vnto my helpe an Englishe man and a citezen of london named farnando Poynts with whose helpe I trust to satesfy and accomplishe the poynts promised vnto her majestie, whereof I hope your honour shall shortely vnderstand, by our diligence the effecte thereof.

ffor the smale numbre of Normandy glas which hathe bene hetherto made is not for that of my parte the workemen did lacke any thing of that they desier nether can I come to the perfett knowledge of the fault, the workemen do lacke of that the promysed to make since the tyme they begane to worke which was the xxiijth daye of October vntill Easter about 200 caces of glass wherby is lost 280^{li} their wages be greate for the principall workemen hathe daylie xviijs, and for that he is bounde to make iij caces of glass which is of his parte not accomplished, and yet payed for them, besydes diuers other workemen which have daylie wages, and should have had no more then yf the numbre of caces that take had been made —Besides that the stufe whereof the foresayd glass might haue bene made is wasted and lost and the wood consumed without profitt, all this vnto my greate griffe and Damage.

I suspecte that the workemen of Normandy glass be leade by some indirect meanes as those of Loraine were by Peter Briet, which Peter Briet hathe ajoyned hym self with John Carre and hathe of hym a graunte of priuilege, which their inderecte dealing can tende to no other ende but to wery me with contynuing of greate charges as the workemen haue threatned me to do—wherein I knowe no remedy. Wherefor and for my dutye sake do gyue your honour to vnderstand parte of the proceadinges and also the greate grief I haue in that it is none otherwise, wherein I labor to forsee the same, and to that ende haue sent my sonne into Germany to haue workemen from thens where he was promysed some at his last being there which was aboute iiij monethes agone, And I vpon the said hope intend fourthwith to seake some commodious place to haue it ready against their comminge.

Right honorable since the ending of this present I haue receyued newes from the glass house that the workemen haue misvsed my sonne in lawe which was ther to see vnto my busines and to preserue my right and he is in such sorte handeled that he is at the pointe of deathe throwe the woundes he hathe receyued of the said workemen, which workemen haue heretofore missvsed my owne sonne without cause which thing I haue alwaies suffred with pacience for that the worke should not be hindered seaking by all meanes possible to please them that theirby I might the better establishe the science in the Realme which is come to their knowledge by the accusation of John Carre and therfore, have taken suche a malice against me, as it maye by their intrety appeare. Humbly beseching your honour therfore that as at the begining I haue taken the same to my protectour and defendour in this any true intention for the establishing of this science in this Realme so it maye please youe to haue suche consideration thereof as shalbe vnto your wisdome thought meate. And thus leaving to troble your honour any longer I beseche the lyuing Lord to haue the same in his keping.

(signed) By me your humble seruant for euer

Antony Becku *alias* dolin.

No. IV.

Enclosure in preceding Document (Lansdowne MS. No. 76, 17th April 1568).

Contract between Thomas and Balthazar de Hennezel, John Chevalier, and John Carré.

We Thomas and Balthazar de Hennezel esquiers dwelling at the glass houses of vosges in the countrie of Lorrayne, John Cheuallier Chastelain, and receyvour of fonteney le chastell. I the said Cheuallier as well in myn owne name as of John Quarre of Andwerp at this presente dwellinge in London, promysing that when nede shalbe and required thereof, to cause the contentes of thies presentes to be satisfied, That is to saye that for vs our heires successors and assignes, we haue made, and do make by theis presentes the associations promesses and covenaunts folloinge, that is to saie, thoughe it so be that the said John Quarre hathe obteyned as well in his name as in the favour of me the said Cheuallier priuelege and permission of the majestie of the Quene of England for the terme of xxi^tie^ yeres to make and builde in the said countrie of England ouens to make great glas, and to vse the commodities of the said countrie as more at large is conteyned in the said permission. We the said Thomas and Balthazar de Hennezel esquiers shalbe bounden to transporte our selues as sone as possible maye be to the said countrie of England, and there to cause to be builded and edified two oouens to make greate glas, and with vs to conducte bring and entreteyne fower gentlemen glasiers, that is to saye, two Tercieurs and two gatherers and with their ayde to make every daye, in eche of the sayd oouens the quantitie of thirtie bundells of glas whyts or coullers good lawfull and merchauntable of good height and largenes well proporcioned, so that we be not deteyned by sickenes or vrgentletts. And as touching the buyinge of the woodes, asshes, sandes, saffre, and all other prouisions necessary to make the said glass, as also for the edifyinge of the oouens, and pott makers, victuell and wages of the gentlemen and servantes ymployed to theffect that the whole charges shall runne amonge the whole companye, that is to saye that we the said De Hennezell Quarrey, and Cheuallier (*sic*) Item we the said De Hennezell have promysed and do promys all fidelitie requisite and due to the companye, so as the worke of the glass be donne partably and duely, as to suche an art is expedient. Likewise we the said Quarrey, Cheuallier and fellowes have promysed to make all dutie and diligence to distribute and sell as well to the said countrie as otherwaies the said glass comminge of the said glasiers to the greate profytt that we can faythfully equitablie and to the partable charges of the companye, and of the whole thereof the said Quarrey and Cheuallier shallbe bounde to kepe a good and Laufull accompte as well of the charges that they shall haue furnished, be it in carriage guidinge wages of servauntes as other like charges convenable and necessarie for the said glass that shalbe done from sixe monethes to six monethes, the whole faythfully and Loyally accompted and shalbe leuied of the first all the charge disbursed by the sayd Quarrey and Chevallier. And of the residue of the profitt that God by his grace shall giue. we the said Hennezel working at two oouens will levie two hundreth crownes euery yere that is to saye from sixe monethes to six monethes for recompence of our thirde of the glass, as haue, the other glasiers, which shalbe payed at the charges of the companye as it is aboue agreed. And as for the surplus of the said profytte yt shalbe parted and deuyded by equall porcion that is to saye th'one halfe to vs the said de Hennezel and th'other to the said Quarrey Chevallier and ffelowshipp. And the foresaid contract of the said ffellowshipp shall enduer by the space of nyne yeres begininge from the daye that the said de Hennezel shall worke of the said oouens and glas, the which promesses

covenaunts associations and agreements beforesayd, the whole accordinge to the pointes and clauses aboue written. We, the said esquires and Chevallier, as well in my name, as the said John Quarrey haue promessed and do promys in good fayth by thies presents vpon obligacion of all our goods wheresoeuer for the which we haue bounde our selues th'one to th'other euer to kepe obserue and enterteyne any thing whatsoever to the contrarye. And in wytness of truth we haue subsigned theis of our signes manuell, the xvijth daye of the moneth of Aprill 1568 after Easter.

So subsyned

Thomas de Hennezel.
J. Chevallier.
Balthazar de Hennezel.[1]

No. V.

Patent Roll, 17 Eliz. p. 13, m. 39, 3 (15th Dec. 1575).

De licen̄ speciali pro J. Verselyne.

Elizabeth by the grace of God etc. To all people to whome etc. gretinge. Whereas the arte and knowledge of makynge of drinkynge glasses suche as be com̄only made and wroughte in the towne of Morano nere vnto the Citie of Vennys in Italye hathe not bene knowen vsed or contynued by anye oure Subjectes or any others inhabiting within oure Realme of England or other owre Dominyons And for as muche as James Verselyne a Venetian borne Inhabitinge within owre Cittie of London hathe to his greate costes and chardges erected and set vppe within oure said Cittie of London one ffurneys and set on worke dyvers and sondrie parsonnes for the makynge of drynkynge glasses suche as be accustomablie made in the towne of Morano aforesaid and hathe undertaken to teache and bringe vppe in the said Arte and knowledge of makynge the said drynkynge Glasses owre naturall Subjectes borne within owre Realmes of England and ellswhere within anye other of oure Domynions which arte and knowledge of makynge the drynkynge Glasses aforesaid to be knowen and wroughte hereafter by owre naturall Subjectes cannot but growe to the com̄oditie of owre com̄on weale for that great som̄es of money have issued and gone furthe of oure said Realmes into the partes of beyond the Seas for that manner of ware—Know ye therefore that we of owre speciall grace certeyne knowledge and mere mocion and for the consideracons aforesaid and other good causes and consideracons vs movynge have geven and graunted and by these presentes for vs owre heires and successors do geve and graunte vnto the said James Verselyne and to his executors admynystrators and assignes and to everye suche other person and persons as the said James Verselyne his executors admynystrators and assignes or anye of them shall name assigne or appoynte full and free libertie licence power and aucthorytie that he and they and everye or anye of them by hym and themselves and his and theyre deputies ffactors servantes and workemen and everye or anye of them at theire owne chardges shall and maye at all and everye tyme and tymes and from tyme to tyme durynge the terme of one and twentye yeres nexte after the date of these presentes within owre Realmes of England and Ireland and within all other owre Dominyons and within everye parte of the same at his and their libertie and pleasure vse exercise practise erecte sett vppe and put in vse the said arte and feat of makyng of drynkynge Glasses or other Glasses whatsoever lyke unto suche as be most vsed made or wroughte in the said towne of Morano And also make erecte and sett vp in anye place as aforesaid any ffurnasse or ffurnasses

[1] This is a contemporaneous translation "out of the original frenche."

whatsoever concerning the said Arte or feate of makinge of drynkynge Glasses aforesaide And the same Glasses so made to vtter and sell in grosse or by retaile or otherwise to do awaye at his and their free will or pleasure and to his and theire coñoditie and profett from tyme to tyme duringe all the saide tearme of one and twentie yeares so that he his executors admynystrators and assignes do vtter and sell the same drynkynge Glasses wroughte and made by hym or anye of them as good cheape or rather better cheape then the drynkynge Glasses coñonlye broughte from the Cittie of Morano or other partes of beyond the Seas & being of as greate and goode value [as] are vsuallie solde or vttred for at this present daye And furdermore we will and for vs oure heires and successors do straightelie chardge enjoyne prohibite and coñaunde and do for the consideracõns aforesaide of oure especiall Grace & certeyne knowledge for vs owre heires and successors graunte to the said James Verselyne his Executors admynystrators and assignes that no parsonne or parsonnes owre naturall Subjectes Denyzens or anye other parsonne or parsonnes either borne within owre Realme of Englande or Irelande or ellswhere within anye other of owre Domynions or of anye other foreyne Realme or Countrey whatsoever of what estate condicion or degree soever they be or shalbe other then the said James Verselyne his executors admynystrators or assignes or such as shalbe by hym or them sett on worke licenced or aucthorised shall or maye hereafter at anye tyme durynge the said terme of twentye and one yeares practise exercise erecte and sett vppe or sett on worke or anye waye counterfeyte the said Arte and feate of makynge the saide drynkynge Glasses or any ffurnasse or ffurnasses concerninge the same within owre Realmes of England and Ireland or ellswhere within any other owre domynions or anye partt of the same vppon payne that whosoever contrarie to the tenor and meanynge of these oure letters patentes shall practise exercise erecte and sett vppe or sett on worke or anye waye counterfeite the said arte and feyte of makynge of the said drynkynge Glasses or anye ffurnasse or ffurnasses concernynge the same shall for everye tyme of his or theyre so doynge forfayte and lose for everye Glasse so made the soñe of tenne shillynges and for everie ffurneys so made and buylded concernynge the saide Arte and feyte of makynge of drynkynge Glasses as aforesayde the soñe of two hundred powndes The one halfe of whiche forfeiture shalbe to vs oure heires and successors and one quarter parte to the said James Verselyne his executors admynistrators or assignes and the other quarter parte to the poore within the Parrishe or parrisshes where the same shall be so made and wroughte And besides that shall incurre owre indignacion and grevous displesure and suffer suche further ymprisonmente and punyshement as we owre heires or Successors or owre or theire pryvie Counsell shall thynke mete. And knowe ye further that for as muche as owre intente and meanynge is that the said arte and feate of makynge the sayde drynkynge Glasses shall remayne and have contynuance within oure Realmes of England and Ireland and other owre Domynions And the rather for that the saide James Verselyne hathe vndertaken for hym his heyres executors administrators and assignes to vtter and putt to sale anye the said drynkynge Glasses so by hym or them theire ffactors or servauntes hereafter to be made as good cheape or rather better cheape then the lyke manner or kynde of Glasses whiche be most coñonly broughte from the said towne of Morano or anye other partes beyonde the Seas and beinge of as good and greate value are coñonly solde for ~ We therefore of owre speciall grace certeyne knowledge and mere mocion do moreover for vs oure heires and successors graunte vnto the said James Verselyne and to his Executors admynistrators and assignes and to everye other personne and personnes that shall or will buye anye suche drynkynge Glasse or Glasses of the said James his Executors admynistrators or assignes That all manner of parsonne or parsonnes whatsoever shall and maye at all tymes hereafter durynge the said tearme of one and twentie yeares at theire pleasures resorte and come to the said James Verselyne his

executors admynistrators and assignes and to everye or anye of them and to have and buye of hym them or anye of them anye suche drynkynge Glasse or Glasses in grosse or by retaile And the same Glasse or Glasses so boughte at theyre will and pleasures with them to take and carrie awaye in by and through and to or from anye place or places whatsoever within oure Realme of England or anye oure Domynions or any parte or partes beyond the Seas—payeng oure customes and duties therefore withoute anye forfeyture or losse and withoute anye trouble lett or molestacion of anye parsonne or parsonnes whatsoever anye pryvylege custome exempcion or libertie to the contrarie in anye wise notwithstanding And furdermore for the consideracions aforesaid of oure especiall grace certeyn knowledge and mere mocion We do more over for vs oure heires and successors graunte vnto the said James Verselyne and to his executors admynystrators and assignes that no parsonne or parsonnes whatsoever shall after the space of two monethes nexte ensuyng the date of these presentes duringe all the residue of the said terme of one and twentye yeares transporte or bringe into this oure Realme or anye oure Domynyons or into anye parte thereof owte of anye forreyne Realme or anye foreyne parte or partes beyonde the Seas anye suche drynkynge Glasse or Glasses as are abovesaid or anye like vnto the same or of the like makynge or of any counterfett makyng like vnto the same vppon payne to forfett and lose all suche Glasse and Glasses so broughte into this Realme and to susteigne imprisonment at the will and pleasure of vs oure heires and successors and moreover to incurre oure highe displeasure and indignacion The one halfe of all whiche forfeitures to be vnto vs oure heires and successors and the one quarter of the other halfe to the said James Verselyne his executors admynistrators and assignes and the other quarter thereof to hym or them that will sue or informe for the same Wherefore we straytelye chardge and coñaunde all and singular Justices of peace Mayors Baylyffes Constables officers mynysters Wardeyns Artificers and other oure Subjectes whatsoever to whome in this behalfe it shall apperteyne that they and everye of them be aydynge helpynge and assistynge to the said James Verselyne his Executors admynystrators assignes deputies servantes and workemen in all reasonable thinges concernynge the accomplishmente of these owre letters patentes or anye parcell of the same And that they or anye of them do not anye waye hynder moleste interrupte or lett the said James Verselyne his executors admynystrators assignes deputies servantes workemen or chapmen or anye of them as they tender owre pleasure and will avoyde oure indignacion and displeasure at theyre vttermost perill And these oure letters patentes shalbe theyre sufficiente Warrante and dischardge in that behalfe ffor that expresse mencion &c. Or anye statute acte ordynaunce proclamacion restraynte pryvylege custome or libertie &c. In witnes whereof &c. Witnes oure selfe at Gorhambury the xvth daye of Decembre

per breve de privato sigillo.

No. VI.

Petition of George Longe to Burghley (Lansdowne MSS. No. 59, Art. 75, 3rd October 1589).

To the Right honourable the Lord Burgleighe Lord Treasurour of Englande.

In the ixth yeare of the Queenes majesties most happye raigne, the first Priviledge for making of glasse in England was graunted vnto Anthonye Beckue als Dollyne & Jno Carye straungers vppon these condicions.

To teache Englishmen the misterye. And to paye custome so muche as had beene paide for the like quantitye before transported from forreine partes.

Dollyne and Carye being merchants & having them selues no skill in the misterye, weare dryven to lease out the benefitt of their Patent, to the frenchmen, who not performing the foresaide covenantes did presentlye adnihillate, and make voide the saide Patent.

The accion notwithstanding hath euer since beene contynued by divers without lycence. By which meanes besides the great spoile of tymber & woods her majestie hath lost the custome of all the glasse made and occupied in England these xxi yeares past, at least amounting to the somme of——800li.

The Premisses considered Dollyne cannot with reason sue to have his Patent renued.

The contynuaunce of the accion heere still without checke will in short tyme encrease the prices bothe of woodes and glasse.

May it please your Honour to graunt me the like patent vppon these condicions ensueinge—that it shalbe proffittable to her majestie, a Benefit to the commune wealthe, and no waye preiudiciall.

I wilbe bounde

Proffittable to her majestie in this. ffor euery glashouse to be contynued in England, to pay an annuall rent insteed of the custome, so shall not her majestie be deceived.

Beneficiall to the commune wealth in this. At no tyme to contynue aboue 4 glashouses in England, whearas there are now 14 or 15, to the great spoile of woodes. But to erect the rest in Ireland, wheare euery glashouse wilbe so good as 20 men in garison, for proof I wilbe bounde to fynd 12 men at euery glashouse sufficiently furnished, ready to serue her majestie within 20 myles of their aboude.

It shall not be preiudiciall for to serue the realme with sufficient quantitye of glass so good & so good cheape as vsually hath beene made and sould by the saide straungers heere.

And whearas it maye be thought that by such a graunte, many poore strangers which now liue by making of glass in England should for want of worke lacke maintenaunce, I wilbe bounde to set them all on worke, some in England & some in Ireland & to giue them wages for wages, they doing worke for worke as at this present they haue.

That I haue reason to desire this sute more than another man

1. I have spent my tyme wholly in the trade so hath no other englishe man.

2. I haue found stuffe meete, and brought to perfection the making of glass in Ireland, keeping at least 24 persons the space of two yeares to my chardges in the tryall aboue——500li.

3. By setting divers in hand to procure the Patent for England, and buying the Patent for Ireland of captaine Woodhouse I have beene at chardges at lest——300li.

4. Vnless I procure them put downe, or else obtaine the Patent for England to repress them I am vtterly vndone. The Reason.—I cannot procure any glassmakeres to remaine and worke in Ireland so longe as they haue libertye heere in England.

They last parliament her majesties shipp writes ioyning with me, we exhibited a bill to haue them putt downe heere in England, which the house did like well of. But being not full read & committed till towardes the end of the Parliament, and the committyes chosen being such as sould woodes to the frenchmen for that purpose, kept the bill and neuer sate thereon, and so it rested vndetermined.

My humble request.

The premisses considered, that it tendeth to the Benefitt of her majestie and the commune wealthe. May it please your honour of your accustomed clemency to conceyue so good an oppinyon as to graunt me the like Patent vppon the condicions before recited. And

(god willing) I will not onely see your honours Building from tyme to tyme repaired with the best glass, but allso giue one hundred Angells to be bestowed wheare it shall please your lordship to appointe. And further as my bounden duety is dayly praye that God may preserue and contynue your Lordship in health honour and happiness.

your Honours poore Orator
George Longe.

The Patent graunted to Dolyn, was dated in September anno 9° Eliz. for xxi yeares and so the same expired. (Endorsed) Patent.

Sute for making of
glass in Ireland

3 Octobris 1589.
George Longe
Humbly prayes y^r^ lordship of y^r^ honorable fauvor to grante vnto hym the like Patent for making of glass as Dolwyn heretofore had.

No. VII.

Letter of George Longe to Burghley (Lansdowne MSS. No. 59, Art. 72, 1589).

Att what tyme that Troubles began in France and the Lowe Countryes, so that Glass could not conveniently be brought from Loraine into England, certaine glass-makers did covenaunt with Anthony Dollyne and John Carye, Merchants of the said Low Countreyes, to come and make glass in England. Whereuppon Dollyne and Carye obtained the Patent for making of Glass in England, in September the ixth yeare of the Queenes Majestie's raigne, for xxj yeares ensuinge, under these conditions, to teach Englishmen, and to pay custome ; which Patent was fully expired a yeare ago.

Carye and Dollyne having themselves no knowledge, were driven to lease out the benefit of their Patent to the Frenchmen, who by no means would teach Englishmen, nor at any time paid one peny custome. Carye being dead, Dollyne took vjd upon a case of glass.

For non performaunce of covenants, their Patent being thus voide, about vj yeares after their Graunt other men erected and set on worke diuers glass-houses in sundry parts of the Realme, and having spent the Woods in one place, do dayly so continue erecting newe Workes in another place without checke or controule.

About vij yeares past your Honour called them that kept Glasshouses before you, to know who should paye the Queene's custome, whose answere generally was, that there was no custome due, but by condicions of a speciall priviledg which no one of them did enjoye, and they not to paye custome for comodyties made within the Realme. Thus hath her Majestie beene deceived and still wilbe without reformation.

I most humbly desire your Honor to grant me the like Patent, considering my pretence is not to contynue the making of Glass still in England, but that thereby I maye effectually repress them. And whereas ther are now fifteen Glass-houses in England. Yff it so like your Honor (granting me the like Patent), to enjoyne me at no tyme to kepe above ij Glass-houses in England, but to erect the rest in Ireland, whereof will ensue diuers commodityes to the commune wealth, according to the effect of my former Petition.

The Woods in England will be preserved. The superfluous Woods in Ireland wasted, then which in tyme of rebellion Her Majestie hath no greater enemy theare.

The Country wilbe much strengthened, for every Glass-house wilbe so good as twenty men in garison.

The country wilbe sooner brought to civilitye, for many poore folke shalbe sett on worke. And wheras her Majestie hath now no peny profitt, a double custome must of necessity be paide. Glass be transported from Ireland to England.

May it please your Honour to be gracious unto me, and God willing, I will putt in sufficient securitye not only to performe all things concerning the Patent, but allso (thankfully acknowledging the good I shall receive by your Lordshipp) to repaire your Honors buildings from tyme to tyme with the best glasse, during the terme of the said Patent; and allso bestowe one hundred Angells at your Honor's appointment. I have spoken to Dollyne, as your Honor willed me; and may it please your Honor to appoint some tymes that we may both attend your Honor.

your Honor's poore Orator
George Longe.

No. VIII.

Patent Roll, 34 Eliz. p. 15, m. 63 (5th February 159½).

De con spīal pro Jeronimo Bowes Mil.

[Recites the grant to James Verselyne] . . .

Nowe knowe you that We of our grace especiall certen knowledg and mere mocion & for & in consideration of the good faithfull & acceptable service vnto vs heretofore done by our trusty and welbeloued servante Sir Jerome Bowes Knight as also for & in consideration of the yearly rent in & by these presentes reserued & to be yearly paiable vnto vs our heires & successors during the terme of yeares hereafter specified have given & graunted & by these presentes for vs our heires & successors doe give & graunte vnto the said Sir Jerome Bowes & to his executors admynistrators & assignes & to every such other person & persons as the said Sir Jerome Bowes his executors admynistrators & assignes or any of them shall name assigne or appointe full and free libertye license power & authoritie that he and they and every or any of them by him & themselves & his & their Deputies factors Servauntes & Workmen and every or any of them at his and their owne charg shall & maye at all and every tyme & tymes & from tyme to tyme during the terme of twelve yeares next and immediately ensueing after the end expiracion forfeiture or determynacion of the powers priviledg and authorities by our said letters patentes soe thereof graunted vnto the said James Verselyne as aforesaid within our realmes of England and Ireland & within all other our domynions and within every parte of the same at his and their liberty and pleasure vse exercise practize erect sett vp and putt in vse the said arte & feate of makeing of drincking glasses or other Glasses whatsoever like vnto such as be moste vsed made or wroughte in the said towne of Morano And also to make erect and sett vpp in any place as aforesaid any fornace or ffornaces whatsoever concerning the said arte or feate of makeing drincking glasses aforesaid And the same glasses so made to vtter & sell in grosse or by retaile or otherwise to doe awaye at his and their free will or pleasure & to his and their best commoditye & profitt from tyme to tyme dureing the said terme of twelve yeares so that he his executors administrators and assignes doe vtter & sell the same drincking glasses wrought

and made by hym or any of them as good cheape or rather better cheape then the drincking Glasses commonly brought from the Citty of Morano or other partes of beyond the seas and being of as greate & good value [as] are vsually sould or vttered for at this present daye yealding & paying then & from thensforthe therefore yearly during the said terme vnto vs our heires and successors into the receipt of our Exchequer the somme of one hundred markes of lawful Englishe moneye at the ffeastes of the Annunciation of the blessed Virgin Marye and Saint Michael the arcangle by even porcions yearely to be paid And furthermore we will & for vs our heires and successors doe straitly charge enjoine prohibit and commaunde and doe for the considerations aforesaid of our especiall grace and certen knowledg for vs our heires & successors grant to the said Sir Jerome Bowes his executors administrators and assignes that noe person or persons our naturall subjectes Denizens or any other person or persons either borne within our realme of England or Ireland or els where within any other our Domynions or of any other forraine realme or Cuntry whatsoever of what estate Condition or degree soever they be or shalbe other then the said Sir Jerome Bowes his executors admynistrators or assignes or such as shalbe by hym or them set on worke licensed or authorised shall or maye at any tyme after the end expiration forfieture or determynacion of the said letters Patentes so thereof graunted as aforesaid vnto the said James Verselyne during the said terme of twelve yeares practise exercise erect & sett vpp or set on worke or any way counterfeite the said Arte & feate of makeing the said drincking glasses or any ffornace or ffornaces concerning the same within our Realmes of England or Ireland or elswhere within any other our Domynions or any parte of the same vppon payne that whosoever contrary to the tenor & meaning of theis our letters Patentes shall practize exercise erect and sett vpp or sett on worke or any waye counterfeite the said arte and feate of makeing the said drinking glasses or any ffornace or ffornaces concerning the same shall for every tyme of his or their soe doeing forfeite & loose for every glasse soe made the somme of tenn shillinges & for every ffornace so made & builded concerning the said arte and feate of makeing of drincking glasses as aforesaid the somme of twoo hundred pounds The one halfe of whiche fforfeiture shalbe to vs our heires and successors & one quarter parte to the said Sir Jerome Bowes his executors admynistrators or assignes & the other quarter parte to the poore within the parishe or parrishes where the same shall be soe made or wrought And besides that shall incurre our Indignation or grevious displeasure & suffer such further imprisonment and ponishment as we our heires or successors or our or their privy Councell shall thinke mete And knowe yee further that for as muche as our intent & meaning is that the said art and feate of makeing the said drincking glasses shall remaine and have continuaunce within our Realmes of England and Ireland and other our domynions And to the intent that the said Sir Jerome Bowes his executors admynistrators and assignes shall vtter & put to sale the said drincking Glasses so by hym or them their factors or Servauntes hereafter to be made as good cheape or rather better cheape then the like mannor or kinde of glasses which be moste commonly brought from the said towne of Morano or any other partes beyonde the seas & being of as good and greate value are commonly sould for We of our especiall grace certaine knowledg and mere mocion doe for vs our heires and successors graunt vnto the said Sir Jerome Bowes and to his executors administrators & assignes and to every other person & persons that shall or will buy any such drincking glasse or glasses of the said Sir Jerome Bowes his executors administrators or assignes that all manner of person or persons whatsoever shall & maye at all tymes from and after the end expiration or determinacion of the aforesaid letters patentes so graunted as aforesaid vnto the said James Verselyne during the said terme of twelve yeares at their pleasures resorte & come to the said Sir Jerome Bowes his Executors admynistrators & assignes & to every or any of

them & to have & buy of him them or any of them any such drincking glass or Glasses in grosse or by retaile and the same glasse or Glasses so bought at their will & pleasure with them to take and carry awaye in by & throughe & to or from any place or places whatsoever within our Realme of England or any our Domynions or any part thereof or to in or through any part or partes beyond the seas paying our Customes & Dueties therefore without any fforfeiture or losse & without any troble lett or molestacion of any person or persons whatsoever any priveledg Custome exempcion or liberty to the contrary in any wise notwithstanding. And furthermore for the consideracions aforesaid of our especiall grace certen knowledge & mere mocion we doe for vs our heires & successors grant vnto the said Sir Jerome Bowes & to his executors administrators & assignes that noe person or persons whatsoever shall after the end determynacion and expiracion of the said terme of one and twenty yeares so thereof graunted vnto the said James Verselyne as aforesaid during the said terme of twelve yeares in & by these presents graunted vnto the said Sir Jerome Bowes transporte or bring vnto this our Realme or any our domynyons or into any parte thereof out of any forraine realme or any forraine part or partes beyond the seas any such drincking glass or glasses as abovesaid or any like vnto the same or of the like makeing or of any counterfeit makeing like vnto the same vpon paine to forfeite & loose all such glass & glasses so to be brought into this realme & to sustaine ymprisonment at the will and pleasure of vs our heires & successors & moreover to incurre our high displeasure & Indignacion The one halfe of all which fforfeitures to be vnto vs our heires & successors & the one quarter of the other halfe to the said Sir Jerome Bowes his executors admynistrators & assignes & the other quarter thereof to him or them that will sue or informe for the same. And further we will & graunte by theis presentes for vs our heires & successors vnto the said Sir Jerome Bowes his executors administrators Deputies ffactors & assignes full power liberty & lawefull authority from tyme to tyme & at all tymes dureing the said terme of twelve yeares graunted by theise presentes by all lawefull waies & meanes to searche try & find out all offenses commytted or done contrary to the intent and true meaning of these our Letters patentes. And further we will & graunte by these presentes for vs our heires & successors that our Lord Treasorer & Barons of our Exchequer for the tyme being by force of this our graunte or the Inrolement thereof in the same Courte at all & every tyme & tymes dureing the said terme at & vppon the requeste of the said Sir Jerome Bowes his Executors admynistrators deputies or assignes Shall make & direct vnder the Seale of our said Courte of Exchequer such & soe many writt or writtes close or patent vnto such Mayors Bayliffes Sheriffes serchers or other officers of vs our heires or successors in such Sheires Counties Citties Burrowes Townes or other places whatsoever within our Domynions as our said servaunt Sir Jerome Bowes his Executors admynistrators or assignes shall at any tyme require Commaunding & charging them and every of them thereby diligently & carefully to enquire serche try & finde out if any contrary to the intente & meaning of theis our Letters patentes shall at any tyme during the said terme make vtter sell barter or exchange any such glasse or glasses or build erect make or sett vp any such ffornace or ffornaces for the makeing of any such drincking glasse or glasses as aforesaid other then the said Sir Jerome Bowes his Executors administrators Deputies factors servauntes or Assignes. And also for the better execucion of this our said graunt we doe by these our letters patentes for vs our heires & successors further give & graunt full power licens & authority to the said Sir Jerome Bowes that he by himselfe & by his Deputies factors servauntes & assignes shall & maye at all tymes & from tyme to tyme during the said terme with assistaunce of some officers enter into any Shippe Bottom vessell boate seller soller shope Warehouse rome & other place whatsoever whiche they or any of them

shall thinke good within this our realme or any our Domynions by water or land as well within liberty as without & there carefully & diligently to try & serche by all waies & meanes for all such drincking glasses as by any person or persons other then the said Sir Jerome Bowes his executors administrators deputies ffactors servauntes or Assignes shall within the said terme of twelve yeares by these presentes graunted be marchandized bought sould kept or put to sale made or transported contrary to the tenor of these our letters patentes or any lawe proclamacion ordinaunce or statute in that behalfe made or ordayned And findeing any such to arrest seize carrie awaye & deliver the same to the said Sir Jerome Bowes his Executors admynistrators deputies or assignes to the vses abovesaid And further that they doe carefully and diligently endevour themselves that the intente & meaning of these our letters patentes maye be duely observed And if in the Execucion thereof they shall finde any resistaunce that they certifie the same into the said Exchequer to the end the offenders therein maye receive condigne punyshment for the same their offenses And further we will & commaund by these presentes that all Mayors Justices of peace Bayliffes Constables Officers Ministers Wardens Artificers & other our Subjectes whatsoever to whome in that behalfe it shall appertaine That they & every of them be aiding & assisting to the said Sir Jerome Bowes his executors administrators assignes deputies servauntes and workmen in all reasonable thinges concerning the accomplyshment of these our letters pattentes or any parcell of the same. And that neither they nor any of them doe any way hinder interrupte or lett the said Sir Jerome Bowes his executors admynistrators assignes deputies servantes workmen or chapmen or any of them concerning the premisses as they tender our displeasure & will avoid our Indignacion & displeasure at their vttermoste perilles And these our letters patentes or the inrolment thereof shalbe their sufficient warrant & discharg in that behalfe And the said Sir Jerome Bowes doth Covenaunt & graunt for himself his heires executors admynistrators and assignes & every of them to & with our said Soveraigne lady her heires & successors & to & with every of them by these presentes that he the said Sir Jerome Bowes his executors admynistrators deputies or assignes or some of them shall & will from tyme to tyme & at all tymes from & after the end expiracion or determinacion of the aforesaid letters patentes graunted unto the said James Verselyne as aforesaid dureing the said terme of twelve yeares then next ensueing at his & their owne proper Costes & Charges finde furnishe & provide to & for the noble men within her Majesties Realme of England & the domynions of the same to drinke in good and sufficient store & quantity of faire perfect good & well fashioned drinking glasses made or to be made with in the Cities or Townes of Venice or Morano Comonly called Venice glasses of such like fashions as are vsually made in Venice & at such reasonable rates & prices as heretofore they have bin sold for within the realme of England or els shall suffer the said Noble men & others of her pryvy Counsell to make provision thereof only to their owne private vse Provided alwaies that if at any tyme hereafter dureing the said terme of twelve yeares graunted by theis presentes vnto the said Sir Jerome Bowes any amytie league & frindshipp shall happen hereafter to growe or be made between vs our heires or successors & the Duke cheife States Rulers & Governers of the said City of Venice & that thereopon we our heires & successors shalbe disposed mynded & determyned to make void or determyn this our present graunt soe made to the said Sir Jerome Bowes as aforesaid That then vpon notice or significacion thereof had given or published onder the hand and names of any six or more of the privy Counsell vnto our heires or successors whereof the lord Treasorer of England for the tyme being to be alwaies one This present graunte & all & every power liberty & authority thereby given vnto the said Sir Jerome Bowes his Executors Admynistrators deputies or Assignes shall cease determyn & be vtterly void frustrate & of none effect to all intentes &

purposes ffor that expresse mencion, &c. Any Acte Statute ordinaunce proclamacion restrainte Custome priveledg or liberty to the contrary etc. In Witnes whereof etc. Witnes our selfe at Westm the fifte day of ffebruary.

per breve de privato sigillo.

No. IX.

Patent Roll, 5 Jas. I., p. 24, memb. 14.

James by the grace of God, &c.

Special Licence for Percival Hart, Knight & Edward Forsett. (Abstract).

[Recites the grant of 5th Feb. 34 Eliz. to Sir Jerome Bowes and the grant of 5th October 4 Jas. I. to the said Sir Jerome.]

Know ye now that We as well for & in consideration of the good & faithful services unto Us heretofore done by Our well beloved Sir Percival Hart Knight & Edward Forcett Esq. as also in consideration of the yearly rent by these presents reserved & to be yearly paid to Us & Our heirs during the term hereafter herein granted, of Our special grace, &c. have granted to the said Sir Percival Hart & Edward Forcett & to their executors, &c. & to such persons as they shall appoint full & free, licence, power & authority that they at their own charge may at all times during the term hereafter expressed within our Realms of England & Ireland at their pleasure, use, exercise, practise, direct, set up & put in use the said art of making drinking glasses or other glasses whatsoever like unto such as be most used in the said town of Morano, & also to make & set up in any places as aforesaid any furnaces whatsoever concerning the said art of making drinking glasses & the same glasses to utter & sell in gross or by retail or otherwise to do away at their free wills & to their best commodity & pleasure, so that they sell the said glasses as good cheap or rather better cheap than the drinking glasses commonly brought from the said City of Morano or other parts beyond the seas & being of as good value as are usually sold at this present day: To hold the said licences, powers & authorities to the said Sir Percival Hart & Edward Forcett, their executors, &c.—immediately after the expiration, forfeiture, surrender or other determination of the said term in the said Letters Patent of 5th Oct. contained, for & during the term and unto the full end of 21 years thence next ensuing & fully to be completed: yielding & paying therefore yearly to Us & Our heirs 100 marks. And furthermore We will & straightly charge, enjoin, prohibit & command that no person Our natural subjects denizens or any other person either born within Our Realms of England or Ireland or elsewhere within any other of Our Dominions or of any other foreign Realm or country whatsoever of what condition soever they be other than the said Sir Percival Hart & Edward Forcett or such persons as shall be by them appointed may at any time hereafter during the said term of 21 years practise erect or set up or in any way counterfeit the said art of making the said glasses or any furnaces concerning the same in England or Ireland upon pain of 10s. for every glass & £200 for every furnace.

And furthermore We grant that all manner of persons may come to the said Sir Percival Hart & Edward Forcett during the said term & may buy of them such glasses in gross or by retail & may take the same away to any part of England or other our dominions or to any parts beyond the seas paying Our customs & duties for the same, without any forfeiture or molestation.

Furthermore We grant that no persons during the said term shall bring into Our said realm or any of Our dominions out of any foreign Realm or any foreign parts beyond the seas any such drinking glass or any like them or of the like making or of any counterfeit making like unto the same on pain of forfeiting & losing the same & of suffering imprisonment at Our pleasure, & moreover to incur Our high displeasure & indignation.

We also grant to the said Sir Percival & Edward Forcett full power by all lawful means to search & find out all offenses committed contrary to the meaning of these Our Letters Patent &c. &c. We also give permission to them to enter into any ship, vessel, cellar, sollar, shop, warehouse, room & other places whatsoever within our Realm or Dominions by water or land & there carefully to search for all such drinking glasses as shall be bought, sold, made, transported or brought into this Realm contrary to these Our Letters Patents & to seize the same. And we command all Mayors, Justices of Peace, constables &c. to assist the said Sir Percival Edward Forcett &c. &c. Witness Ourself at Westminster the 8th day of October.

By writ of Privy Seal &c

[This grant is of great length.]

No. X.

PATENT ROLL, 8 JAS. I., p. 12.

License to William Slingesby Knight & others. (*Abstract*).

This indenture made 28 July, 8 James (1610) between the King of the one part and Sir William Slyngesby Knight one of the Carvers of the most excellent Princess Queen Anne, Andrew Palmer, a Lay Master of his Majesty's Mint, Edmond Wolferston gent & Robert Clayton citizen of London on the other part Witnesses that forasmuch as the woods & timber within the Realm of England & Wales & the Dominions thereof are by the continual great expences and employment thereof about fuel much diminished and do daily more & more decrease so that the prices and rates of them are become very excessive whereby it is to be feared there may in time grow great scarcity and want of fuel & timber as well for the maintenance of his Majesty's Navy as for divers other necessary and important uses. And whereas the said Sir William Slingesby, Andrew Palmer, Edmund Wolferston & Robert Clayton have by chargeable experiment & great industry & labour invented devised & sought out many & divers ways & means whereby in divers & sundry matters wherein wood or charcoals are now altogether used & expended the same shall & may be for the most part performed & effected with seacoals or pitcoals to the great saving of wood & timber, & that in & about such things as are now usually effected with seacoals or pitcoals alone, a less proportion of the same seacoals or pitcoals shall or may suffice. And that the furnaces works & devises by them newly found out & offered to be made applied and used in such several forms and fashions as the materials whereupon they are to work shall require, that is to say for the boiling of beer and ale, dyes of all sorts, alum, sea salt, salt peter, spring salt, copperas, soap and sugar, & for the melting of ores of all kinds & mineral earths of all sorts & extracting and severing of the several metals out of & from the same, and for the melting of glass, ordinance, bell metal, lattyn, copper, brass, tin, lead & other metals & for "segaring" of them or any of them & for the "nealing" or heating of copper, lattyn & iron & other metals to make

battery works or any other works thereof, & for the baking, burning & drying of bread, pastery of all sorts, bricks, tiles, pots, malt & hops, and also for the boiling, melting, segaring, nealing, heating, baking & drying of divers other metals materials & things of like & different natures will prove very commodious profitable & good for the common wealth of this Realm by the abating lessening & diminishing of the huge expence of wood charcoal pitcoal seacoal & other fuels which are now consumed & spent upon the same & especially by the application of the use of pitcoal or seacoal instead of wood or charcoal in boiling, melting, segaring, nealing, heating, baking, burning and drying of those materials whereupon great quantity of wood & charcoal is now wasted and consumed. And yet nevertheless the effects, matters, business & works so done & performed by their said new invented or applied furnaces & other devises shall be as perfect good "marchantable" and available for use as the like now are, which good & profitable services they offer to perform & execute by furnaces & other means of a form or forms newly devised & invented by themselves & now offered to be applied aswell for the use of sea coal or pit coal where wood and charcoal have been formerly & usually expended, as also for the saving of a good proportion of wood, charcoal & pitcoal or seacoal, where the same is now commonly burned:

His Majesty therefore tending the weal of this realm & the benefit of his subjects, & to the end that the said Sir William Slingesby, &c. may receive some convenient recompense for their inventions, labors & charges in & about the premises, at the humble suit of the said Sir William, & in consideration as well of his services done to his Majesty's most dear wife Queen Anne as also in consideration of the several yearly rents compositions & sums of money by these presents reserved & covenanted to be paid as well to his Majesty as to his son Henry Prince of Wales, of his special grace has licensed & authorised & by these presents for his Majesty his heirs & successors doth give & grant to the said Sir William Slingesby, Andrew Palmer, Edmund Wolferston, & Robert Clayton full & absolute license, liberty, power, faculty, privelege, authority & immunity to make, frame & erect & cause to be made, framed & erected all & every such & so many furnaces, ovens, stoves, vessels, structures, engines, devises & things of earth, clay, stone, metal or other stuff or substance whatsoever within the realm of England & Wales & the dominions thereof as they shall think meet for the uses & purposes aforesaid, being not heretofore by any other person put in use or applied to the said purposes. And to the end the said Sir William Slingesby &c. may have some recompense for their costs & charges already expended & hereafter to be sustained & for their industry & pains so taken His Majesty of his special grace grants to them that no persons whatsoever other than themselves shall during the term herein after expressed, make, frame, erect, utter, sell, use or apply any such furnaces, ovens, stoves, vessels, structures, engines, devises & things as aforesaid in England & Wales. To have use or exercise the said liberty & license to the said Sir William Slingesby &c. for 21 years now next coming immediately from the date of these presents, they paying for the same the yearly rent of £20 into his Majesty's Exchequer at Michaelmas & Lady Day, and paying for 3 years & no longer, to begin immediately after the feast of the Annunciation of the Blessed Mary next coming, to the said Henry Prince of Wales the yearly rent of £100 at Michaelmas & Lady Day. After the said 3 years the said Sir William &c. are to pay to the said Prince one full sixth part (in 6 parts to be divided) of the clear yearly benefit & profit which they shall make or get in money, rent or composition for money or other benefit whatsoever. And the said Sir William &c. agree to make every year a true declaration of all the sums of money & benefit by them received & to pay a true proportion thereof to the said Prince. The King forbids all other people

without the consent of the said Sir William Slingesby, &c. to make or set up such furnaces &c.

Witness Ourself at Westminster 28 July.

By writ of Privy Seal.

No. XI.

State Papers, Domestic, Jas. I., Vol. 61, No. 113 (26th February 161$\frac{0}{1}$).

Sr Wm Slingsby to Salisbury.

May it please your Lo:

Understandinge that S^r^ Ed: Zouche & others thatt have observed by our practises in the new Invented furnaces, the meanes we have fownd out to make Glass of all sortes wyth seacole, doe now prefer Petitions to your Lo^ps^ for the obteyninge of a Pattent of Privilidge, in that particoler, as if the Invention weare there owne, to our prejudice to whome the same is alredye graunted, and putt in use; I therefore humbly beseche your Lo: eyther to gyve impediment to there procedings, in respect of our former grant, and industryes, or thatt we may be admytted to preffer our just exceptions before any new graunte be made unto them: And thatt for the better incoradginge of us in these our comendable indevours, (far excedinge all Pattentes of lyke nature, in respect of the assured universall benefytt, which shall in tyme redownd to his M^ts^ subjectes), Thatt it wyll plese your Lo: to gyve warrant, for the drawinge of a Declaration in Print, resytinge the effect of our grawnt (intended so much to the publyke advantadge) as well to gyve notyce to all sortes of People, where to resorte to resave benefytt, by us, for resonable composytions, as to restrayne some thatt alredye seeke to make use of our fornaces by secrett meanes wythout composytion, contrary to the prohibition in our Pattent, and to the contempt of his M^ts^ Royall Prerogative, and comandment. And althowgh, by reson of some mens unwyllingnes to alter there old courses, and of others combynations to beate downe the rates of composytion, our busynes haythe had as yett butt slow progression, yet shall those few wee have delte wythall, justyfye the excellency of the Invention, if there be occasyon to gyve your Lo: better assurance, which wyll no dowbt be in the end dispensed, to the subjectes grete advantage; and resonable recompence for our Chardges and indevors the Inventors: for which your Lo: and the furtheres of this busynes shall resave Honnor and blessings from all sortes of people: And ever comand the humble and dewtyfull affections of your Ho^rs^ faythfull servaunt

W. Slyngisbye.

26 of february 1610.

[*Endorsed*] Sr Wm Slingesby
1610
to my Lo:
Glasse.

No. XII.

PATENT ROLL, 9 JAS. I., p. 29.

Grant to Edward Zouch Knight & others. Vacant because surrendered to the King by the said Sir E. Zouch &c., 11th Feb. 11 Jas. I. (Abstract).

Absolute Licence to Sir Edward Zouch Knight, Bevis Thelwall, gentleman, two of our servants, Thomas Percivall, gent. & Thomas Mefflyn Our glasier to melt & make all manner of glasses with sea-coal, pit-coal, fucash or any other fuel whatsoever, not being wood, in England & Wales for 21 years, no other persons to make the same during that term: The said Sir Edward & the others paying therefore yearly £20 to the King & £10 to the Prince of Wales.

Saving nevertheless & reserving out of this Our present grant to Sir Jerome Bowes, Knight, Sir William Slingsby Knight, Andrew Palmer Sea-master of Our Mint, Edmund Wolferston, gent. & Robert Clayton all the right title & interest which they have by virtue of their several Letters Patent made to them according to the true intent & meaning of the said Letters.

Witness Ourself at Westminster 25 March
By Writ of Privy Seal.

No. XIII.

PATENT ROLL, 11 JAS. I., p. 16.

Special License granted to Sir E. Zouch Knt. & others. (Abstract).

Full & free license & liberty to Sir Edward Zouch Knight, Bevis Thelwall, Thomas Percivall & Robert Kellaway Esq^rs^ to melt & make drinking glasses, broad glass & other glasses & glass work for 21 years, paying therefore yearly £1000.

The said Sir Edward Zouch, Bevis Thelwall, Thomas Percival & Thomas Mefflin (now deceased) had spent £5000 at the least upon their invention.

Witness Ourself at Westminster 4 March
By writ of Privy Seal.

Notes on Zouch's 2nd Patent, 11 Jas. I., p. 16, 4th March 1614.

The invention which is late brought to that perfection, though We could not heretofore be induced to believe that it would ever have been brought to pass, as we are assured thereof through plain and manifest demonstration several furnaces of them being now at work.

Declare all previous licences as now given hurtful & prejudicall shall be frustrate.

Grant in consideration of the surrender of their former patent sole licence for making all manner of drinking glass, broad glass & other glasses & glass works for 21 years to same patentees (Mefflyn being dead is replaced by Kellaway),

Subject to £1000 a year rent

Forbids—All others to make glass with wood,

Prohibits—Importation of foreign glass,

Forbids—Retail glass sellers to contract with foreign glass makers.

No. XIV.

State Papers, Domestic, Jas. I. (Royal Proclamations, No. 42, 23rd May 1615).
By the King.

Transcript of printed document.

A Proclamation touching Glasses.

It hath bene of all times truly esteemed as a principall Patrimonie of this Our Realm of England, and a precious inheritance both of Crowne and Subiect, in that Our said Realme hath yeelded goodly quantities and aboundance of Wood and Timber, in a manner & nature almost incomparable; for that the timber therof is not only great and large in height and bulk, but hath also that toughnesse and heart, as it is not subiect to rive or cleave, and therby of excellent use for Shipping, as if God Almightie which had ordained this Nation to be mighty by Sea and navigation, had in his providence indued the same with the principall materiall conducing thereunto: Wherfore it being Our princely office and care, to cherish & second the blessings of God upon Our people and Countries, and not to indure a wastfull destruction and consumption of them, and speciallie to provide that matters of superfluitie do not devoure matters of necessity and defence; understanding that of late yeeres the wast of Wood and Timber, hath been exceeding great and intollerable by the Glasse-houses and Glasse-workes of late in divers parts erected: Wee have thought it highly to concerne the good of Our people to give a speedy remedy to the same: And although the case doe so import the State of this Our Kingdome, as it were the lesse evill to reduce the times unto the ancient manner of drinking in Stone, and of Latice-windowes, then to suffer the losse of such a treasure; yet God hath so provided by the comfort and encouragement which We are accustomed to give to new and profitable Inventions, as the civilitie of the times may be maintained; and neverthelesse, this great mischiefe restrained and avoyded, in that there hath beene discovered and perfected a way and meanes to make Glasse with Sea-cole, Pit-cole, and other Fewell, without any manner of wood, & that in as good perfection for beauty and use, as formerly was made by wood. Therefore We doe by these presents straightly prohibite, constitute and ordaine, that from the day of the date of this Our Proclamation, no person or persons whatsoever, shal melt, make, or cause to be melted or made, any kind, forme or fashion of Glasse or Glasses whatsoever, with Timber, or wood, or any Fewell made of Timber or wood, within this Our Kingdome of England and Dominion of Wales, or any part thereof, upon paine of forfeiture of such Glasses made as aforesaid, and other punishment for their contempt in that behalf. And that also from henceforth no person or persons whatsoever, within any of Our said Kingdome & Dominion, shal erect or build, or cause to be erected or built, any furnaces, structures, engines, or devises, for the melting or making of any kind or sort of Glasse or Glasses with Timber or Wood, or any Fewell made of Timber or Wood, upon paine of Our indignation, and such other punishment, which by Our Law or prerogative Royall may be likewise inflicted upon them, any charter, license, power, authoritie or priviledge to the contrary in any wise notwithstanding. And We doe hereby also straightly charge, prohibite, constitute, and ordaine upon like paine as aforesaid, that from henceforth no person or persons whatsoever, shall at any time hereafter, import or bring, or cause to be imported or brought into any of Our said Kingdome of England or Dominion of Wales, or any part therof, from or out of any Realme or forreine part or parts beyond the Seas, or out of any other of Our owne

Kingdomes and Dominions, any manner, kind, or fashion of Glasse or Glasses whatsoever. And further upon the like paine, that no person or persons whatsoever, that now use, or hereafter shall use the Trade or Occupation of retayling, selling or uttering of drinking-Glasses, or other Glasses within any of Our Kingdomes, shall at any time hereafter, directly or indirectly, buy, bargaine, or contract for any kind or fashion of Glasse or Glasses made beyond the Seas, or in any other place out of Our said Realme of England and Dominion of Wales, to be imported into this Our Kingdome of England, and Dominion of Wales.

Given at Our Mannor of Greenewich the xxiij. day of May, in the thirteenth yeere of Our Raigne of England, France, and Ireland, and of Scotland the 48.

God save the King.

Imprinted at London by Robert Barker,
Printer to the Kings most excellent Majestie.
Anno Dom. 1615.

No. XV.

State Papers, Domestic, Jas. I. (Sign Man. Vol. 5, No. 85).

Grant of Annuity to Sir J. Bowes, 17th Mar. 1615.

A long document of about 40 folios. After the Grant are these words following :—

It maie please yor excellent Matie. This bill conteineth yor Ma^ts^ grant unto S^r^. Jerome Bowes Knight during his life and three yeares after his death of an Anuitye of 600^li^ out of rent reserved upon the new Patent of glasse workes. And is in consideracõn of certaine former rents wch he had out of the old glasse workes.

Signified to be yor Ma^ts^ pleasure by the Ll^s^. of yor Ma^ts^ privie Councell.

Fr. Bacon.

No. XVI.

State Papers, Domestic, Jas. I., Vol. 104, No. 21.

Petition of Sr Robert Mansel [*Probably December* 1618].

To the right hono^ble^ the Lords and others of his Ma^ts^ most hono^ble^ privy Councel.

The humble peticion of Sr Robert Mansel Knight Vice admirall of England.

Humblie sheweth, That whereas it hath pleased his Matie for consideracõn of state to graunte his Lres Patents to the right honorable the Earle of Mountgomery, yor Lo^ps^ peticoner, and others, for the sole makeing of Glasse wth in the realme of England, wth prohibicõn to all other psons to make or import any, under such paine as in the said lres pattents and his Maties proclamacõn, is at large expressed: Notw^thstanding^ wch pattent and proclamacõn, divers psons have attempted and doe daily attempt ye erectinge of fornaces, and to ymport glasse contrary to the said lres pattent^s^, and in contempt of his Maties pleasure signified by his proclamacion.

And whereas yor Lo^pps^ peticoner is possessed of the whole interest of all the said Pattentees, and thereby doth stand engaged not only for paym^t^ of 1000^li^ a yere

reserved to his Ma^ts coffers uppon the said graunt, but doth also pay 1800^li p Annū to the other Pattentees, most of them his Ma^ts s^rvants, besides dischargінge the debts of the pattentees for and concerninge glasse busines, In wch doeing your peticoner hath disbursed out of his owne estate many thousand^l pound^l, and the worke yett unsetled, by reason of the said daily interrupc̃ons. Humblie prayeth yor Lo^pp that out of yor honorable consideraco̅n of the great expence and charge of your peticoner, and for the enablinge him to contynue his said Rent to his Matie and the Pattentees yo^u would bee pleased to graunt unto him your l̃res of Assistance to be dormant aswell for the ruynatinge and pulling downe all furnac^l that shalbe sett to worke, as alsoe for the searching and seizinge of all glasse and glasses imported, and apprehendinge of all such p̃sons as shall ymport any contrary to the said Pattent and Proclamac̃on, and them to bringe upp by messenger to answer their contempt before yor Lo^pp. And that yor Lo^pps l̃res in that behaulf may have the same Extent of word^l as is in the said pattent & proclamac̃on expressed. And your Lo^pp petic̃oner shall pray &c.

[*Dated in a somewhat later hand*] July 1618.

No. XVII.

State Papers, Domestic, Jas. I., Vol. 97, No. 54 (4th May 1618).

Mansel to Calvert.

Sir, upon the humble submission of Paull Vinion and Peter Comley two Glassemakers against whome I complained unto the Lord^l for working of glasse with wood contrary to his Maties Proclamacion, I am now contented that they putting in bond to his Matie in such a competent some of money (as you shall thinke fitt) that they shall not at any tyme heerafter directly or indirectly make any Glasse with wood or otherwise contrary to his Maties L̃res Patent^l in that behalfe, nor without my consent, And that therupon they may bee released from the custody of the Messenger, and their further attendance; and so I recom̃end my love unto you, this 4th May 1618.

Yo^r assured well wishing freind
Robert Mansell.

[*Adressed*] To the right wo^pll my very good freind
Sr George Calvert Knight one of the
Clarks of his Maties most ho^ble
Privie Counsell &c.

[*Endorsed*] 4 May 1618.
From Sr Robert Mansell Knight concerning
Paule Vinion and Peter Comley Glassemakers.
to Sr Geo. Calvert.

No. XVIII.

22ND MAY 1623.

MANUFACTURE OF GLASS WITH FUEL, NOT BEING TIMBER OR WOOD.

Transcript of printed document.

Mansell's Specification.

James, by the grace of God, &c., to all to whome theis presentꝭ shall come, greeting.

Whereas in and by our Letters Patentꝭ sealed with our Greate Seale of England, bearing date att Westminster, the Nineteenth day of Januarie, in the twelveth yeare of our raigne of England, Fraunce, and Ireland, and of Scotland the eight and fortith, it is (amongst other thinges) mentioned that wee, taking into our consideracõn the daylie wast and decay of tymber and wood within our realme of England and Wales, and the dominions of the same, insoemuch as where thentofore this our kingdome was furnished and adorned with goodlie quanteties of the same, not onlie for the navies and inhabitants thereof, for their continuall vse and comfort and for store and provision against all occacõns and accidentꝭ, but alsoe to serve and supplie forraigne partꝭ with the same in great plentie, and that then of late contrariwise the continuall consumpc̃on of the same, and that many tymes in superfluous and vnnecessarie thinges, did both encrease intollerablie the rates and prices of tymber, wood, and fuell, in an excessive and vnreasonable manner, and alsoe threaten an vtter want and scarcety thereof, soe much that then our subiectꝭ of this kingdome of late yeares had bene forced to vse tymber, firewood, and fewell brought from forraigne parts, whereby greate damage in tyme to come would growe to our realme and subiectꝭ of this kingdome for want of necessarie provision, as well for making and repairing of shippes (being the principall defence of this our kingdome), as alsoe for conuenient buildingꝭ and firewood in all places if conuenient remedie according to the good pollicie of State were not in time provided; and that wee were therefore mooved, out of our especiall care of the future good of this our kingdome, not onelie to make provision for the preservacõn and encrease of tymber and wood by good lawes and ordinaunces, but alsoe to embrace all proffittable and beneficiall devises, proiectꝭ, and inventions that might tende to the furthering thereof, soe that, perceaving glasse workes and working of glasses with tymber and wood to be one of the greatest and cheifest meanes to consume and destroy tymber and wood; whereas thentofore we had given and graunted licence vnto Sir Jerome Bowes, Knight, within our realmes of England and Ireland, to vse the arte and feate of making drinking glasses and other glasses for a certaine tyme and terme in the said recited Letters Pattentꝭ expressed, and thereby had prohibited all others to make the said glasses, vppon expresse provisoe and condition that wee, our heires and successors, might frustrate, determine, and make voyde the said recited Letters Pattentꝭ of licence in such case, as in the same Letters Patentꝭ is expressed; and that afterwardes by our Letters Patentꝭ under the Great Seale of England wee did alsoe give and graunt the like licence to make drinking glasses and other glasses vnto Sir Percivall Hart, Knight, and Edward Fawcett, Esquier, from the expiracõn or determinacõn of the said Sir Jerome Bowes his Patent for and during the terme and space of one and twentie yeares thence next ensueing; and that alsoe by the like Letters Patentꝭ under our Greate Seale of England wee did graunt licences vnto Edward Salter, Esquior, to vse the art of makeing all manner of

drinking glasses and other glasses and glasse workes not prohibited by the former Letters Patentt, as by the said severall Letters Patentt appeared; and it is alsoe in and by our said Letters Patentt, bearing date the said Nineteenth day of Januarie, in the said twelveth yeare of our raigne of England, mentioned, that wee then latelie having certain notice and perfect knowledge that the said severall recited Letters Patentt of licences were growne verie hurtfull and preiudiciall vnto this our realme, there being then lately p̄sented vnto vs by Thomas Percivall, Esquier, a proiect of newe invention for the makeing of all manner of glasses with pitcoale and other fuell, not being tymber or wood, or made of tymber and wood, which wee had then bene slowe to beleive, vntill, att the greate chardge of the said Thomas Percivall, the same was brought to perfection, as plainelie appeared by manifest and demonstrative experience, in and by the severall furnaces then latelie erected and built by the said first Inventor Thomas Percivall and his partners; and it is further menc̄oned in and by the said Letters Patentt, bearing date the said Nineteenth day of Januarie, that forasmuch as the vse and exercise of the libertie and authoritie by the said three former recited Letters Patentt menc̄oned to be graunted were growne hurtfull and preiudiciall to the common weale and the preiudice of them was likelie daylie to increase, vnles some provision thereof were made, wherevppon the said Letters Patentt were become voide in lawe, and to be overthrowne by ordinarie course of lawe in such cases used; wee did by the same Letters Patentt, bearing date the said Nineteenth day of Januarie, expresse and declare that wee did not purpose to take vpon vs the defence or protection of any the said Letters Patentt, or of any thing in any of them mentioned to be graunted, and that such course should from tyme to tyme be had and vsed against all persons that should take vppon them to vse or exercise any power, priviledge, or libertie, by pretext or coulor of any the said Letters Patentt, as our lawes in such case should permitt and requier; with this, that for the preservac̄on of wood and tymber wee did purpose to take such course for the generall restraint of our people from the making of glasse with wood or tymber as should be agreeable to the good of our people and the state of the coīonwealth; and it is alsoe menc̄oned in and by our said Letters Patentt, bearing date the said Nineteenth day of January, in the said twelveth yeare of our raigne of England, that wee (for the considerac̄ons therein expressed) did give and graunt vnto our right trustie and right welbeloved cosen Phillipp Earle of Mountgomery, and to our right trustie and right welbeloved cosen Thomas Viscount Andever, by the name of our trustie and welbeloved subiect and servaunt Sir Thomas Haward, Knight, and to our trustie and welbeloved subiect and servaunt Sir Robert Mansell, Knight, Sir Edward Zouch, Knight, Sir Thomas Tracy, Knight, Thomas Hayes, Esquior, Bevis Theloall, Thomas Percivall, and Robert Kellaway, their deputies and assignes, full and free licence, power, privilege, and authoritie, that they and everie of them, their and every of their executors, administrators, assignes, deputies, servauntt, workemen, factors, and agentt, should and might from tyme to tyme and at all tymes thereafter during the terme and space of one and twentie yeares next and iīmediatlie ensueing the date of the said Letters Pattentt att their and everie of their willes and pleasures, vse, exercise, practise, sett vpp, and putt in vre the art, misterie, and feate of melting and makeing of all manner of drinking glasses, broade glasses, windowe glasses, looking glasses, and all other kinde of glasse, glasses, bugles, bottles, vialls, or vessells whatsoever made of glasse, of any fashion, stuffe, matter, or mettall whatsoever thentofore vsed and thenafter to be devised or vsed in this our realme of England and Wales and the dominions thereof or elswhere, with seacoale, pittcoale, or any other fewell whatsoever not being tymber or wood, nor made of tymber or wood, in and throughout this our realme of England and Wales and the dominions thereof, and within everie or any part of the same and elswhere within any of our kingdomes and dominions, yeilding and payeing therefore yearelie

during the said terme and tyme of one and twentie yeares vnto vs, our heires and successors, the anuall or yearelie rent, farme, or some of one thowsand poundes of lawfull money of England; and it is alsoe menconed in our said Letters Patentt, bearing date the said Nineteenth day of Januarie, that wee did thereby graunt that noe person or persons whatsoever, other then the said Phillipp Earle of Mountgomerie, Sir Thomas Haward, Sir Robert Mansell, Sir Edward Zouch, Sir Thomas Tracie, Thomas Haies, Bevis Theloall, Thomas Percivall, and Robert Kellaway, their executors, administrators, deputies, and assignes, agentt, factors, and servauntt, should att any tyme thereafter during the said terme of one and twentie yeares import or bring into our said realme of England and Wales or the dominions thereof, or to any part or parcell thereof, out of or from any realme or forraigne part, any manner or kind of glasse or glasses whatsoever before in the said Letters Patentt mentioned, of what mettall, stuffe, or fashion soever they were, nor directlie or indirectlie buy or contract for any kinde or sort of glasse made beyonde the sea, or in any place out of this realme of England and Wales or the dominions thereof, nor sell or vtter any such, as by the said Letters Patentt, amongst divers graunt, powers, priviledges, and other thinges therein conteyned, more att lardge appeareth.

Nowe, forasmuch as the said Sir Robert Mansell, by agreement and contract with the rest of the said Patentees, taking vppon himselfe the exercise and execucon of the said Letters Patentt of priviledge, was charged and burthened with the payment, not onelie of the said yearelie rent of one thousand poundes, but with sundrie other greate yearelie paymentt unto divers others that were interessed in the said Patent of priviledge, all which paymentt did amount vnto in the whole the somme of twoe thowsand and eight hundred poundes by the yeare att the least, and in respect thereof could not vtter and sell the glasses made by vertue of the said Pattent of priviledge for such moderate prices as was fitting for our subiectt; and in respect thereof, and because all importacon of glasse made as well in any other of our owne dominions as in the dominions of any forraine princes or states, was, by the said Letters Pattentt of priviledge, prohibited and restrained, the said Letters Patentt of priviledge, bearing date the said Nineteenth day of Januarie, did growe hurtful and preiudiciall to the common weale, and accordinglie the same were complained of in the last convention of Parliament as a grievance, soe as the said Letters Patentt, bearing date the said Nineteenth day of Januarie, in respect of the preiudice thereby acrewing to the comon wealth, are become voyde in lawe, and to be overthrowne by the ordinarie course of lawe in such cases vsed: Knowe yee, that wee, taking the premisses into our gracious and princely consideracon, doe hereby declare, that insoemuch as the said Letters Patentt bearing date the said Nineteenth day of Januarie, and other the Letters Patentt before mentioned and recited, did become preiudiciall to the publique, and the execution of them greivous to our loving subiectt, that wee will not hereafter take vppon vs the defence or protection of any the said Letters Patentt or of anything in any of them mentioned to be graunted, and that such course shall and may from tyme to tyme be had and vsed against all persons that shall hereafter take vppon them to vse or exercise any power, priviledge, or libertie, by pretext or coulor of any the said Letters Patentt, as our lawes in such case shall permitt or requier; and yet nevertheles, vppon deliberate advise with the lordes and others of our Privie Councell, and att the humble peticon of the said Sir Robert Mansell, setting forth that the making of glasse of all kindes within this kingdome with seacoale and pitt coale was brought to a full and exact perfection for the vse and good of our kingdome with the expence of his whole fortunes, and vppon due consideracon of the many and faithfull services of the said Sir Robert Maunsell, and finding by the peticons and certificates of the glasse sellers, looking glasse makers, glasiers, and spectacle makers in and neere our cittie of London, made and certefied,

some of them to the cõmons in the last convention of Parliament, and the rest vnto the lords commissioners by vs appointed to take consideration of the businesse of glasse workes, that the glasse made by the said Sir Robert Mansell was perfectlie good, cleare, and marchantable, or rather better glasse then formerlie was made with wood, and that there was sufficient store made not onelie to serve England but alsoe to serve other countries if neede were, wee are pleased and resolved, and doe hould it most requisite and necessarie for the good and benefitt of this realme, that the making of glasse with seacoale and pitteoale be continued, and that all makeing of glasse with wood for ever hereafter shall cease, and the priviledge for sole makeing thereof with seacoale and pitteoale shalbe renewed to the said Sir Robert Mansell not onelie as a token of our grace and favor towardt̃ him for his many and well deserving services, but as a recompence for the great chardge and expence which for vpholding and bringing of that worke to full perfection hee hath disbursed, to the weakening of his estate, but yet without any restraint of the importac̃on of forraigne glasse, and without burthen of rent or otherwise which might occac̃on the inhancing of prices to our subiectt̃, whereby all iust grievaunce shalbe taken away by our owne losse of the añuall rent which vppon the said former Letters Pattentt̃ was reserved vnto vs: Knowe yee further, that wee, aswell for and in considerac̃on of the good and faithfull service done vnto vs by the said Sir Robert Mansell our Vice Admirall of England, as alsoe of the great paines chardges, hazard, disbursement, and expence of great sõmes of money and other detrimentt̃ which the said Sir Robert Mansell hath vndergone and bene att in and about the said worke of makeing of glasse with seacoale, and for other good causes and considerac̃ons vs hereunto mooving, of our especiall grace, certaine knowledge, and meere motion, have given and graunted, and by theis presentt̃, for vs, our heires and successors, doe give and graunt unto the said Sir Robert Mansell, his executors, administrators, and assignes, full and free libertie, licence, power, and authoritie, that hee, the said Sir Robert Mansell, his executors, administrators, assignes, deputies, servauntt̃, workemen, factors, and agentt̃, shall and may, from tyme to tyme and att all tymes hereafter during the terme of yeares hereafter in theis presentt̃ mentioned, att his and their and every of their wills and pleasures, vse, exercise, practise, sett vpp, and putt in vre the arte, feate, and misterie of melting and makeing of all manner of drinking glasses, broade glasses, windowe glasses, looking glasses, and all other kinde of glasse, glasses, bugles, bottles, violls, or vessells whatsoever made of glasse, of any fashion, stuff, matter, or mettall whatsoever, heretofore vsed or hereafter to be devised or used in this our realme of England and Wales and the dominions thereof, or elswhere, with seacoale, pitteoale, or any other fewell whatsoever, not being tymber or wood, nor being made of tymber or wood, in and throughout this our realme of England and Wales and the dominions thereof, and within everie or any part of them or any of them, and to make, erect, and sett vpp as many furnaces, engins, structures, and devises for that intent and purpose, and in as many places of our said realme and dominions, as hee or they shall thinke fit, agreeing with the owners of the soyle for the same, and the glasse and glasses, bugles, bottles, violls, and vessells soe made to vtter or sell in grosse or by reteayle, or otherwise to doe away, att his and their or any of their free will and pleasure, to his and their proffitt and cõmoditie during all the said tearme herein-after mentioned, and that hee, the said Sir Robert Mansell, his executors, administrators, and assignes, and his and their deputies, servauntt̃, workemen, and agentt̃, haveing licence from the said Sir Robert Mansell, his executors, administrators, or assignes, shall and may from tyme to tyme during the said terme have and enioy the sole trade of making and melting of all manner of drinking glasses, broade glasses, windowe glasses, looking glasses, and all other kinde of glasse, glasses, bugles, bottles, violls, or

vessells in forme aforesaid, and that noe other during the said terme shall or may vse or practise the arte or feate of making or melting of any glasse with tymber or wood, nor with pittcoale or seacoale, or other fuell not being tymber or wood, nor made of tymber or wood; to have, hould, vse, exercise, practice, and putt in vre the said lycence, libertie, priviledge, authoritie, ĩmunitie of and for melting and makeing of all and all manner of drinking glasses, broade glasses, windowe glasses, looking glasses, and all other kinde of glasse, glasses, bugles, bottles, vialls, and vessells whatsoever, with seacoale, pittcoale, and other fewell, not being tymber or wood or made of tymber or wood, in all partt' and places within our said kingdome and dominions, vnto the said Sir Robert Mansell, his executors, administrators, deputies, and assignes, and their and everie of their servantt', workemen, factors, and agentt', for and during the whole terme and to the full ende and determinac̃on of fifteene yeares next ensueing the date of theis our Letters Pattentt' fullie to be compleate and ended freelie and absolutelie without any rent, accompt, sõme or sõmes of money, reckoning, allowance, or any other thing whatsoever, to vs, our heires or successors, to be therefore paide, made, given, answered, or done in any manner of wise; and to the ende the said Sir Robert Mansell, his executors and assignes, may receave, perceave, and have such benifitt, profitt, and cõmoditie as wee intende vnto him and them by this our graunt, and as the perfecting of soe greate a worke with such care and hazard deserveth, and for the better encouraging of him and them to reduce the said business to a further perfection, wee doe hereby expresslie declare and signifie our royall pleasure to be, and wee doe strictlie chardge, inhybite, and commaunde all and everie other our loving subiectt', and all and everie other person and persons, of what estate, degree, or condic̃on they or any of them be, that they presume not nor attempt by any art, act, or devise whatsoever, directlie or indirectlie, to make any manner or kinde of drinking glasses, broade glasses, windowe glasses, looking glasses, or any other kinde of glasse, glasses, bugles, bottells, violls, or vessells whatsoever made of glasse as aforesaid, with seacoale, pittcoale, or any other fewell not being tymber or wood or made of tymber or wood, att any time during the said terme, without the speciall consent and licence in writeing of the said Sir Robert Mansell, his executors, administrators, or assignes, but that the full and whole benifitt and profitt of makeing of all and all kindes of glasse and glasses whatsoever as aforesaid, with pitcoale, seacole, and other fewell not being tymber or wood nor made of tymber or wood, within everie part of our said kingdome and dominions, shalbe and remaine during all the said tyme and terme to the sole and onelie behoofe, disposic̃on, and vse of the said Sir Robert Mansell, his executors, administrators, deputies, and assignes, and to none other person or persons whatsoever; and we doe further by theis presentt' streightlie chardge, cõmaund, and prohibite, and doe signifie our Royall will and pleasure to be, that noe person or persons whatsoever, of what estate, degree, or condic̃on soever they or anie of them be, other then the said Sir Robert Mansell, his executors, administrators, deputies, and assignes, and such as shalbe licenced, authorised, and sett on worke by him or them or any of them, doe, shall, or may, att any tyme hereafter, during the terme of yeares before mentioned, practise, erect, or sett vpp, by any waies or meanes, the said art and feate of makeing of any kinde of glasse or glasses, bugles, bottells, violls, or vessells whatsoever, or any furnace or furnaces for makeing thereof, within our said kingdome and dominions, vppon paine of our heavy displeasure and due punishment for the contempt of our Royall cõmaundement in that behalfe; and wee doe by theis presentt' give and graunt vnto the said Sir Robert Maunsell, his executors, administrators, and assignes, deputies, factors, and agentt', and everie of them, full power, libertie, and authority, from tyme to tyme and att all tymes during the said terme, by all lawfull waies and meanes, to search, trie, and finde

out all offences and actt cõmitted and done contrarie to the true intent and meaning of theis our Letters Patentt; and likewise, for vs, our heires and successors, wee doe hereby, of our especiall grace, certaine knowledge, and meere motion, give and graunt vnto the said Sir Robert Mansell, his executors, administrators, deputies, assignes, factors, agentt, and servauntt, free power, libertie, licence, and authoritie to vtter and sell in grosse or by retaile such kinde of glasse or glasses before mentioned as shalbe made by vertue of theis our Letters Patentt; and if hee or they shall have more then will serve vs, and the subiects of vs, our heires and successors, that then hee and they, and such others as shall buy the glasses made as aforesaid of him or them or anie of them, to transport and carrie over into forraigne partt soe many and soe much thereof as they shall thinke fitt, paying vnto vs, our heires and successors, the customes due to be paid for the same, and leaving sufficient quantetie for vs, our heires and successors, and our or their subiectt, att reasonable prices; and wee doe further, for vs, our heires and successors, will and graunt by theis presentt that our treasorer, chauncellor, and barons of the exchequer for the tyme being, or any of them, by force of this our graunt, or the inrollment thereof in our Court of Exchequer, from tyme to tyme and att all tymes hereafter during the said terme, vppon the request of the said Sir Robert Mansell, his executors, administrators, assignes, or agentt, shall graunt, make, and direct, under the seale of our said Court of Exchequer, such and soe many writt and writtt, close or patent, unto such mayors, bayliffes, sheriffes, customers, comptrollers, searchers, and other officers of vs, our heires and successors, in such shires, counties, citties, townes, borroughes, and other places whatsoever within our said realme of England and Wales and the dominions thereof, as the said Sir Robert Mansell, his executors or assignes, shall att any tyme and from tyme to tyme requier, thereby chardgeing and cõmaunding the said officers and everie of them diligentlie and carefullie to inquier, trie, search, and finde out all and everie person and persons as contrarie to the true intent and meaning of theis our Letters Patentt shall att any tyme during the said terme make, vtter, or sell any such kinde of glasse or glasses whatsoever herein-before mentioned, or build, make, erect, vse, or sett vpp, or cause to be builded, made, erected, or sett vpp, any such furnace or furnaces, structures, engines, for devises, or the melting or makeing of any the sortes or kindes of glasse or glasses before mentioned vntill they vnderstand the pleasure of our said treasorer, chauncellor, and barons of our said Court of Exchequer in that behalfe, and further order by them taken therein; and we doe hereby, for vs, our heires and successors, will and cõmaunde the treasorer, chauncellor, and barons of the Exchequer for the tyme being and everie of them, that they or any of them, vppon complaint made by the said Sir Robert Mansell, his executors, administrators, or assignes in that behalfe, doe all that in justice they may, aswell for the demolishing of the said furnaces, structures, engines, and devises sett vpp or devised contrarie to the true intent of theis presentt, as for the apprehension and lawfull punishment of such as shall offend against any part of theis our Letters Patentt; and for the better execuc̃on of this our graunt we doe hereby, for vs, our heires and successors, give and graunt full power, licence, and authoritie vnto the said Sir Robert Mansell, his executors, deputies, and assignes by himselfe or themselves, or his or their agentt, factors, or servauntt, with the assistaunce of some officer appointed for preservac̃on of the peace, to enter into any glasse house or glasse howses, and other place or places whatsoever, within any part of any of our kingdomes and dominions, aswell within liberties as without, where any such furnaces, structures, engines, or devises shalbe made or sett vpp, contrarie to the true intent of theis presentt, or where any glasse is made, contrarie to the priviledge hereby graunted, shall probably and reasonablie be suspected to bee, and there, by all lawfull waies and convenient meanes, to trie and search for all and all manner and kinde of any the glasse or glasses before in theis our Letters

Pattentt mentioned, and glasse workes erected or made in any part of our said kingdome or dominions, to be bought or soulde, contrarie to the true intent and meaning of theis our Letters Patentt, or to any lawe, proclamation, ordinaunce, or statute, in that behalfe made or ordeined, or to be made or ordeined, and if vppon search they shall finde any such glasse or glasses made, or any glasse worke or furnace built or erected, contrarie to the true intent and meaning of theis presentt, that then with all convenient speede hee or they doe signifie the same to vs, our heires or successors, or to the treasorer, chauncellor, and barons of our Exchequer, or anie of them, for further order to be taken therein as shall appertaine; and further, that hee and they and everie of them doe carefully and dilligentlie labor and indeavor that the true intent and meaning of theis our Letters Patentt may be trulie observed; and if in execuc̃on thereof hee or they or anie of them shall finde any resistaunce, then to certefie the same vnto our said Court of Exchequer, to the ende the offendors therein may receave condigne and deserved punishment for their severall offences; and wee doe further hereby straightlie chardge and cōmaund all mayors, sheriffes, justices of peace, bayliffs, constables, officers, and ministers, and all other the subiectt of vs, our heires and successors, to be aiding and assisting vnto the said Sir Robert Mansell, his executors, administrators, deputies, assignes, factors, and workemen, in all reasonable thinges concerning the accomplishment of theis our Letters Patentt; and that they or any of them doe not att any time or tymes hinder, molest, interrupt, or disturbe th'execution thereof, as they tender our heavie displeasure and will avoyd our indignation; and wee doe likewise charge the Attorney Generall of vs, our heires and successors, for the tyme being, to be ayding and assisting to the said Sir Robert Mansell, his executors, administrators, and assignes, in the mainteyning and vpholding of theis our graunt and priviledge, and in complayning against such as shall withstande or impugne the same, whereby they may be censured and punished according to justice; and theis our Letters Patentt or th'inrollment of them shalbe their sufficient warraunt and dischardge in that behalfe; provided alwaies, and our will and pleasure is, that this our present graunt, or any thing therein conteyned, shall not extend or be construed to extende to debarr, hinder, or lett any person or persons whatsoever to import or bring or cause to be imported or brought into this our realme of England and the dominion of Wales, and there to vtter, sell, and dispose of any glasse or glasses, of what kinde or sort soever, made within our realme of Scotland, or in any forraigne parte beyond the seas, but that it shalbe lawfull for all person and persons to import into and vtter and sell within the said realme of England and dominion of Wales, or any part of them, any glasse or glasses whatsoever, made within the said realme of Scotland, or any forraigne partt, as aforesaid, any thing in theis presentt conteyned to the contrairie in any wise notwithstanding; paying, nevertheles, vnto us, our heires and successors, such customes, subsedies, imposic̃ons, and other duties as shalbe due and payable for the said glasse and glasses soe to be imported att the tyme of the importation of the same.

And, lastlie, wee doe by theis presentt, for vs, our heires and successors, of our further especiall grace and favor, graunt vnto the said Sir Robert Mansell, his executors, administrators, and assignes, that theis our Letters Patentt or the inrollment of them shalbe taken, construed, and adiudged in all and everie our courtt of justice and elswhere to be most availeable for the said Sir Robert Mansell, his executors, administrators, and assignes, against vs, our heires, and successors, notwithstanding the not describing the certeintie of the forme of the furnaces, structures, engins, and devises to be vsed for the melting and makeing of all manner of drinking glasses, broade glasses, windowe glasses, looking glasses, or any other kinde of glasse, glasses, bugles, bottles, violls, or vessels whatsoever, and notwithstanding the not perticuler nameing or misnaming of the kinde or manner of glasses

to be made by virtue of this our graunt, or the sizes or scantling of the same, and notwithstanding anie other defectt and incertainties in the same, any statute, lawe, provision, proclamacon, or restraint to the contrarie; and although expresse mention, &c.

In wittnes whereof, &c., wittnes our selfe att Westminster, the Twoe and twentith day of May.

P bire de priuat sigill, &c.

No. XIX.

State Papers, Domestic, Jas. I., Vol. 162, No. 64.

Transcript of printed document.

Reasons against Sir R. Mansel's Patent, 16th Apr. 1624.

Reasons proposed unto the Honourable Assembly of the House of Commons, why the Patent granted unto Sir Robert Mansel, for the sole making and melting of all manner of Glasse, with Sea-coale, Pit-coale, and Scotch-coale, and restraining of all others but such as are licenced by him to make Glasse should be voyd; with an answer of the severall Obiections of Sir Robert Mansell his printed Breviat.

1. First, two severall Parliaments already, that is to say, in 12 Jacobi and 19 Jacobi have adiudged former Patents granted unto others, for the sole making of Glasse, to be a Monopolie and generall Grievance unto the Subiect.

2. The Invention of making Glasse with Sea-coale and Pit-coale, was practised in severall parts of this Kingdome, before the first Patent granted, and so much was apparantly proved in the severall Parliaments, whereby the appropriating of the Invention unto the Patentees, and the suggestion unto his Maiesty proved to be untrue.

3. The restraint of men from their lawfull Trade, wherein they have beene trained from their youth, is against the Law of the Land, and may prove very preiudiciall unto the Common-wealth.

4. When one man hath the sole making and melting of Glasse, it is in his power to make what Glasse he will, and to set what prices he list, there being no Glasse to be had but from him and such as he shall authorize: where if every Artist hath a free liberty to make Glasse, then may the subiect buy where he may have the best for price and goodnesse; and window-glasse would be sold for 16s. the Case, that now is sold for 22s. 6d., in all parts of the Kingdome where it shall be made, and as large, and better Glasse then now is made by Sir Robert Mansel and his Agents.

5. Sir Robert Mansel himselfe being unskilfull in the making and melting of Glasse and erecting of Fornaces, is uncapable by the Law, in respect of his owne person, to have a Patent granted unto him, and the supply by a Deputy will not serve the turn.

6. There is an increase of yeares in this Patent, so as this Patent holding, the poore Glasse-makers which have beene kept from their trade already ten yeares, shall be kept out of it fifteene yeares more, the which restraint having already eaten out many, will consume all the rest.

7. Where inconveniences have appeared to ensue unto the Common-wealth, the usuall redresse hath alwayes been by Act of Parliament, and this hath been the cause of the

severall Statutes that have been made for the preservation of the wood of this Kingdome, & a Patent to restraine men of their lawfull trade because of the consumption of wood, was never seen before this Patent granted, & especially the wood which the Glasse-makers use, being lops of trees. And besides, it appeares by severall Acts of Parliament, that Iron-works which are greater consumers of wood then Glass-houses, are allowed, and the Wyld of Sussex, Surrey and Kent where a great part of the Glasse-houses were erected are full of them.

8. The great Officers of the Kingdome, as the Lo: Treasurer and Chancelor; of the Exchequer, the Judges of the Realme, the Barons of the Exchequer, and the Officers of Justice have all commandement given them by this Patent, to assist Sir Robert and his Agents, in the granting of Writs for searches to bee made in apprehending of such as shall offend against this Patent, and in making of entry into mens houses, whereby his actions are countenanced under the colour of Justice by Officers of Justice.

9. Since the last order in Parliament, some have had their Glasse seized and taken away from them, others have beene imprisoned untill Sir Robert gave way for their liberty; others not being suffered to worke in their lawfull trade, have starved and perished, and their children doe begge their bread.

10. Where all kind of course drinking-glasses, distilling-glasses, urinals and water-glasses, were twenty yeares before any Patent was granted, sold for 8d., they are now sold for 12d., or more: and if the Patent were dissolved they would be so sold againe.

11. Whereas there was two Patents formerly condemned in the Honorable Assembly of the Commons as Monopolies, this Patent was procured (in the same nature) as a new Invention to make Glasse with coale, the same may be disproved by one of the members of the Honorable Assembly of the upper house of Parliament, viz. the Lord Dudley, who can testifie that two yeares before this pretence of a new invention, or any Patent granted, there was Glasse made with coale upon his ground by native Glasse-makers, whereby it may appeare that this was no new Invention.

12. Before this Patent granted there were 60 native Englishmen Glasse-makers in these greene workes, and if these Patents had not been procured, they might have increased to many more: but being by this Patent discouraged, (for that when an Apprentise hath served his time, and then should looke for freedome, as the custome in all other trades is, he shall then be tyed to more slavery then he was in his Apprentiship) they themselves put their sonnes rather to any other trade then this, and all others refuse to serve therein, which hath and will breed a great decay amongst them.

13. For Venice-glasse the first Patent was granted to Jacob Verseleene, on purpose to instruct the natives of these Dominions therein, but the same hath been altogether neglected, and (although that Patent hath continued almost fifty yeares) but very few Englishmen have beene brought up in that Art, and most of those (by reason of these late Patents) have beene forced to forsake the Kingdome, and seeke their livelihood elsewhere, where (if this Patent were dissolved) they would returne, and in short time there would be a sufficient number of natives to practise that Art, who would presently afford that for 3s., which is now sold for 4s. at the least.

14. For fine Venice-glasse, that which is now sold for 10s., if the Patent were dissolved would be sold for 8s., and yeeld his Maiesty great custome.

15. Whereas all the Kingdome are now tyed to one market, and to what price they meane to set, if the Patent were dissolved, and the natives had free liberty, Glasiers and others trading in Glasse or Glasses, might have free markets, and have choise of Glasse and prices, and at the rates before mentioned: for it may appeare and be proved under Sir

Robert Mansel's owne hand, that he hath bought Glasse for 14s. the Case, and sold the same for 22s. 6d.

The Answer unto the severall Obiections of Sir Robert Mansel's printed Breviat.

1. First, this Patent although it differeth from the other in the point of giving liberty of importation, yet the omission of this restraint will not make it good in that part which tends unto the restraint of the poore Glasse-makers from their lawfull trade. And besides, there hath beene a proiect for laying of Impost upon Glasse imported, although it hath not yet beene put in execution, but ever since the Patent no Glasse imported can be had away from the Customers untill Sir Robert hath given his warrant.

2. As unto the Obiections of Bungar's offer of 500l. per annum, and Worral's offer of 1000l. per annum unto the King to have a Patent granted unto them, it will appeare upon sight of their severall Petitions, that they never desired a Patent, but to have liberty of the free use of their trade for themselves and the other natives. There was a ioynt offer by Bungar and Worral of 1000l. per annum, without desire eyther to gaine the sole trade unto themselves, or to restraine any others, but rather then they would be kept out of their trade, as they had beene ten yeares before, they would redeeme their liberty with the payment of 1000l. per annum.

3. As unto the severall aspersions cast upon Bungar by Sir Robert in his printed Breviat, they are untrue. Sir Robert his aimes being to disgrace him, because his ancestors being the men that brought the trade of window-glasse into England, which had beene lost many yeares before, he being restrained by this and the other Patents, hath beene a petitioner against these Patents, as at both the severall Parliaments, and yet is, a great many of the others being vanished that were formerly petitioners together with him. And if Bungar had caryed himselfe otherwise then well Sir Robert had power enough to have rectified any iniury that Bungar should have done him, others having had the wofull experience of it.

4. As concerning the offer of 200l. per annum by Sir Robert unto Bungar, he confesseth the offer, but he refused it, because it would have beene a meanes that a great many of his kindred & others which had bin trained up in the trade, would have perished, the cause wherof might have bin imputed unto him, if had ioyned with Sir Robert Mansel.

5. As concerning the difficultie of having Clay, obiected by the Breviat, that difficulty is falne since these Patents granted, for the Glasse-makers before these Patents, never found any want, but had it upon reasonable termes within the Kingdome.

6. As concerning the deare sale of Glasse by Bungar, it was Normandy glasse, the materialls of which cost more then ordinary glasse, and therefore to be sold dearer, and then he sold that for 30s. the Case, which cannot be had out of Normandy under 40s., and ordinary glasse he sold at 15s. and 16s. the Case, better then now is made.

7. As concerning the Certificates of diuers in and neere London, made for Sir Robert Mansel, it is to be observed that they are those which receive a benefit of this Patent, because Glasse being onely to be had in the City of London, they buy it of Sir Robert Mansel, and the Country taketh it from them at their owne prices, whereby they receive a great benefit, and the Country much preiudice.

8. It will be apparantly proved that Glasse is sold now 8s. and 7s. in the Case dearer then it was before the Patent, & yet the Glasse better, and as broad in those times as now.

9. As concerning the supposition of the many natives that are now set on worke, there were more before the Patent granted then are now, and the Grinders, and Polishers spoken

of in the Briefe, are very few in number, and there were as many before the Patent granted as now.

10. As concerning the many ships that are now supposed to be set on worke by reason of this proiect, it will fall out upon examination that two ships will be able to serve Sir Robert Mansel his turne, and doe more then he hath occasion to imploy them in.

11. As concerning the strangenesse of finding the making of Glasse with Sea-coale, it would not have beene so strange unto those that had formerly made Glasse with coale, for they doe not know any reason but that Glasse may as well be made with Sea-coale as with Scotch-coale and pit-coale, there being no great difference betwixt them.

12. As concerning the great summes of mony which are suggested to be expended by Sir Robert Mansel, that is no wayes to be a safeguard unto his Patent, in regard himselfe gave his voyce against the first Patent, and well knew it was adiudged a Monopoly and Grievance before he medled with it.

13. The expence hath been occasioned through the unexperience and want of skill in Sir Robert himselfe, which must not be a cause of other poore mens sufferings.

14. The Imperiall Law imposeth upon a Monopolist a confiscation of his goods, and although the Common Law be not so strict, yet for the most part that Judgement followeth a Monopolist, because there be few that are first setters of a Monopoly on foot, that have beene knowne to thrive by it.

15. As concerning the decay of wood supposed by Glasse-houses in Warwickshire and Wiltshire, if any such thing were, it is so long since done, that no man living remembers it, and where scarsity of wood is, the Glasse-maker by the dearnesse of wood will be scared away without any tumult raised against him, because he will not be able to live by his Glasse.

16. As concerning greene Glasses and Urinals unto which no Patent (untill these later Patents) extended were sold before the Patent cheaper almost by halfe then now they are, howsoever the contrary be now pretended.

[Endorsed] 16°. April 1624. Reasons ag^{t} ye Patt. for sole making of glasses.

No. XX.

State Papers, Domestic, Jas. I., Vol. 162, No. 63.

Transcript of printed document.

Defence of Sir R. Mansel's Patent. [*Nov. ?*] 1624.

The State of the Cause touching the Glasse Businesse, and the Reasons to maintaine the present Patent, Against the Petition of Isaac Bunger, John Worrall, and others, to the Honorable House of Commons in Parliament assembled.

That His Maiesty taking into His Royall Consideration, the Universall decay of Wood and Timber, through the Kingdome, and the generall complaint of the Subiects, for the consumption thereof, in Glasse-workes, for remedy thereof, and for the necessary preservation of the remainder, many good Lawes having beene from time to time, made to that end (no Wood of what groath soever, but being more usefull for many purposes then fiering, and no wood fit to make Glasse, under 20. yeares groath) Was graciously pleased to grant the sole and onely making of glasse with Pit-coale and Sea-coale, to certain Patentees, (at whose charge the same was then brought to be made with Scotch-coale,) prohibiting all making of

glasse with wood, and all importation from Forraine parts, for the tearme of 21. yeares, under the yearely rent of 1000l.

That then the Patentees endeavouring to make Glasse with Cole, for the service of the Kingdome, with all sorts of Glasse, (as by the Patent was intended) after the disbursement of great summes, growing weary of the charge assigned their interest over.

That also Bunger the prime petitioner about that time attempted the making of glasse with cole, but finding no likely-hood of perfection, and the difficulties, hazard, and charge too great for him to undergo, desisted, when he had spent much money therein.

That after all which, Sir Robert Mansell having purchased a ninth share in the Patent, and finding the losse of the manufacture (wherewith above 3000 natives are at this day maintained in the Kingdome) to be in hazard, or the generall destruction of wood and timber to be renewed, did undertake the perfecting of that worke, paying to his Maiesty the 1000l. per ann. reserved, and to every of the eight Patentees 200l. per ann. during the tearme.

That thereupon Sir Robert Mansell first erected workes at London, for the making of Window-glasse with Scotch-cole, but finding the charge thereof too excessive to subsist under, removed to the Isle of Purbeck, and after workes there erected, the Cole prooved altogether unusefull, and then hee was driven to make tryall at Milford haven in the County of Pembroke, where workes being erected, the Cole prooved neither serviceable, nor the transportation of glasse possible to be had, and after exceeding losses he was constrayned to remoove into Nottinghamshire upon the River of Trent, where Furnace being likewise built, and materials provided, Cole and transportation arising to a greater charge then the businesse could beare, was enforced for his last refuge contrary to all mens opinions to make triall at New-Castle upon Tyne, where after the expence of many thousand pounds, that worke for Window-glasse was effected with New-castle Cole.

That after all this charge, no Clay could be by any meanes had to make pots neerer then the County of Stafford, from whence it was brought to New-Castle at an infinite charge, untill by practise of some of the Petitioners (who all this time laboured with all endeavours and meanes to overthrowe the whole businesse) the same was corrupted, insomuch that it became altogether unserviceable, and pots continually brake to his great losse. Then hee was forced to his farre greater charge to send for Clay from beyond Roan in France, which by all likely-hood was by the procurement of Bunger corrupted by Frenchmen his kinsmen there; and after that, to his more increase of charge, was driven to have the same from Spawe in Germany, where a sort of excellent Clay was found, which they caused to be so corrupted, that a whole Ships lading thereof was spoyled, to the exceeding great charge and losse of Sir Robert Mansell, not onely in the expence of money in sending to finde out the same, and to provide it, But especially in being disapoynted thereof, without which Bunger well knew no glasse could possibly be made.

But at last with great care, and search of expert and skilfull men, a veyne of Clay was found out in Northumberland, which well serveth the workes: where if that had fayled, Sir Robert had sunke under the burthen of the whole businesse, with the losse then of 24000l. And that it is the more probable that Bunger hath used these severall practises for the destruction of the whole businesse, Sir Robert Mansell desiring to have employed him, freely offered him 200l. per ann. to oversee his workes, and the good condition of his glasse, which he seemed not to refuse, but being demaunded by a Gentleman, why he entertayned not Sir Roberts offer, he made answere, that he had 1000l. left to confound him and his Patent, if hee could but procure some great person to countenance him therein, and hath at diverse times come to the Furnaces of the Patentees, encouraging the workemen (being his Nephewes

and neere Kinsmen) to ruine the workes, shewing them a bagge of money, and promising that they should never want whilst that lasted.

And that after, Sir Robert Mansell finding that by the practise of Bunger with the worke-men, they could be reduced to no conformity, neither in the quantity of glasse to be made for the service of the Kingdome, nor in the condition nor size thereof, but that his losses and charge dayly increased, and the subiects ever complayning either for the badnesse, or want of glasse, was of necessity enforced to send into Forraigne parts for strangers to maintaine the workes, which in the end to his exceeding great charge he obtayned, otherwise the whole businesse had beene utterly confounded, as Bunger had often threatned it should.

And that to the end the generall and absolute manufacture of all sorts of glasse might be wholy perfected in this Kingdome, Sir Robert Mansell did (to his exceeding great charge) bring into the Kingdome many expert Strangers from Forraigne parts, beyond the Seas, to instruct the Natives of this Kingdome, not onely in making all sorts and kinds of right Christalline Morana-glasses, and spectacle glasses (which were never made or attempted here before,) but also in the making of Looking-glasse plates, and for the grinding, polishing, foyling, and caseing of them, being all severall professions, which were never before made nor done in England, a worke of that consequence, that in the Signiory of Venice, none are suffered to carry any away unwrought, under paine of confiscation, and other great punishments.

That some of the petitioners having by practise set on foote a Patent for the making of glasse in Scotland, with liberty of importation into England, of purpose to destroy and roote out the whole manufacture in this Kingdome, did combine with the Maisters of Shipping, that usually served Sir Robert with Scotish-coale, for the making of Christall and white glasse in London, that they sodainly raissed their usuall prizes from foureteene shillings the tonne, to twenty foure shilling the Tonne, and after so disappoynted him that no Scotch Cole could be had for money to maintaine the workes for three weekes, whereby the whole businesse was brought into that straight, that after the disbursement of 33000l. at the least, to bring it to that state and perfection it was then at, it had beene utterly overthrowne, had not the Lady Mansell contrary to any probable hope or expectation adventured upon the working with New-Castle Cole, (a thing never before attempted or thought possible) and by undergoing of many great losses, and persisting in the prosecution in the end accomplisht it, and so farre perfected that worke, that never better glasse of all sorts was made in England, then is now constantly made with New-Castle Coale.

That in the honourable house of Commons in the last assembly of Parliament, (Sir Robert Mansell being then employed at Sea) the Patent was questioned as a grievance, for that the barring of all importation seemed a discountenance to Navigation, and that Sir Robert Mansell might thereby sell what sorts of Glasse hee pleased, and at what rates. And the Patent was for that cause (being the mayne poynt obiected against it) declared a grievance, albeit the Lady Mansell humbly petitioned that in respect of Sir Roberts absence in employment by the State, the reasons and motives touching the upholding of the Patent could not so cleerely appeare, and the speciall papers and writings concerning the same, were so in his custody that she neither knew of them nor how to come by them, And that none could so well bee acquainted with his interest and right therein as himselfe (having gained knowledge thereof with so much trouble and at so deere a rate); Humbly praying their further respite and consideration in the cause.

And that after upon petition of the Lady Mansell to his Maiestie shewing the reasons aforesaid, he was graciously pleased to continue the liberty and priviledge granted by the said Letters Patents untill Sir Roberts returne from Sea.

That his Maiesty publishing his Highnesse pleasure by Proclamation touching the publique grievances complayned off, in that assembly of Parliament, declared many to be grievances, and prohibited the exercise of any liberty or priviledge granted formerly touching the same, and expressed them particularly, and many others were referred to their validity at law, which are likewise severally named, but touching the Patent for Glasse no mention is at all therof made in the Proclamation.

That Sir Robert Mansell petitioned his Maiesty that the Glasse busines being brought to perfection with the expence of his whole fortunes, and having no interest therein at Law, humbly prayed a new Patent, and that he may be discharged of the rent of 1000l., and withall that hee might be enabled to recover the debts and rents due for the glasse-businesse; His Maiesty referred the consideration to the Councill board.

At a full board, (the Prince his Highnesse being present) it was referred to a Committee to examine and make report, viz. To the Lord Treasurer of England, the Lord Steward, the Lord Marques Hamilton, the Earle Marshall of England, the Lord Chamberlaine, the Earle of Carlisle, the Lord Vis-Count Grandeson, and Mr Chancellor of the Exchequer.

The Lords Committees made severall propositions to Sir Robert Mansell, and obiections whereunto he severally answered in writing.

To the first, touching the rent (after several reasons for the abatement of the rent) he sheweth, that for seaven yeares he was at the yearely losse of 5000l. besides buildings, and could not assure himselfe constantly to serve the Kingdome till August last, and that if hee then should have fayled in the businesse, he had lost 38000l. He proceedeth to the losse sustayned by the Scotish Patent, and sheweth, that having made a Contract with Mr Robson for 100l. by the weeke for diuers, he left the bargaine by reason of the Scotch importation, and after that a contract was made with the Glasse-sellers of London for 60l. by the weeke, which they likewise refused to continue for the same cause, and that in one branch of the businesse, he weekely disbursed 60l. and received not certainly 10l.

To the second, touching the Invention, he setteth it forth as is before expressed.

To the third, touching the quality and prises of the Glasse, he referreth himselfe to the Certificats of the Shop-keepers, Glasiers, Looking glasse-makers, and Spectacle-makers.

That about this time Bunger became a petitioner to the Lords, that he might have the Patent for making of Greene-glasse, and Window-glasse, and offered for it 500l. per ann. And Worrall one other of the petitioners (being a Broker) then also petitioned the Lords, that he might have a patent for the making of all the other Glasse, and offered 1000l. per ann. for the same, which must have beene wrung out of the Subiects, whereby it is evident that their prosecution in the Honorable house of Commons in Parliament, is and hath beene of meere malice to ruine Sir Robert Mansell, complayning against him for that which they both endeavoured without cause or color, to have gayned to themselves.

Upon Consideration of all which the Lords reported, that they held fit not to advise the upholding of the patent (being complayned of as a grievance in Parliament,) but thought fit that a new patent should be granted without rent, and importation left free.

That upon Consideration of the report, the Lords of the Councell in generall, concurred in opinion with the Lords of the Committee, and thought fit to moove his Maiesty therein.

That his Maiesty according to the report and order, and for the preservation of wood and timber, and in respect of the merrit and great disbursements of Sir Robert Mansell in bringing the worke to a full perfection, and beeing satisfied with the goodnesse and reasonable prises of the Glasses, by the severall Certificats of the Shop-keepers, Glasiers, Looking-glasse-makers, and Spectacle-makers, by which meanes his Maiesty perceiving all iust occasion of grievance to be taken away, did grant the sole making of all Glasse in

England to Sir Robert Mansell for 15 yeares without rent, leaving importation of Glasse open for all parts.

The Motives and Reasons for the supportation and maintenance of the Patent, with the benifits arising generally to the Subiect thereby.

That the Woods and Timber of the Kingdome, which have beene heretofore so much consumed with Glasse-workes, that the Subiects in all parts where Glasse was made with it, have much complayned and repined thereat, not onely with curses and imprecations, but the Inhabitans and Commons of Warwickeshire felt the same so grievous, that they rose in tumults, and expelled the Glasse-makers by force; and that Buckall within sixe miles of Salisbury, being a Wood of great content, and seated in a scarce Country was wholy consumed by Glasse-workes, to the great damage of the City and Country about, beeing now driven to fetch their wood ten miles from their habitations, so that rather then Glasse should have continued to have beene made with wood to this day, it would have been much better for the Kingdome never to have had glasse, and the consideration whereof (being of farre more weight then the losse of Glasse) hath still induced his Maiesty, and the whole body of the Councell to cherish any invention that might any way tend to the preservation of wood.

That Sir Robert Mansell having with seaven yeares patience expected the event of this worke, bending all meanes and endeavours for the perfection (when it was even given over of all men) hath brought it to that effect, that it hath not onely spared wood, but is made with a Coale never thought to have beene possible to make Glasse with, and the very invention of making it with that Coale, and that at New-Castle, is farre more commodious and benificiall to the state, then all the other branches of the busines. 1. For that the expence of Coale, (when Scotish coale was used) amounted to above 4000l. per ann. where now the Kingdome not onely receives the benefit of the Coale, and the money remaines here, but which is more, a great number of people are employed in the getting and carrying of Coale, (a Commodity for no other use then for fireing). 2. For that there is employed in bringing of Coale from New-Castle to London, for the works here, and in bringing of the Glasse made at New-Castle to London, and in carrying of ashes and materialls for Glasse from London to New-Castle, forty sayle of shipps continually, there being yearely brought betwixt three and foure thousand cases of Glasse, and no shippe able to bring conveniently above fifty case at once, which onely employment may (under favour) be thought rather to deserve encouragement then otherwise.

That there is imployed in the Glasse busines, and thereby maintained, about 4000. Natives, whereof in the onely manufacture of Looking-glasses (never made in England untill Sir Robert Mansell procured workemen hither) there is not so few as 500 persons mayntained, As first the Glasse-makers, then the grinders, the polishers, the Foylers, and the Case-makers, and their severall families, and for every 20l. which Sir Robert receives for Looking-glasse plates, the other workemanship after comes to 50l., all which is money kept in the kingdome, besides the bringing in of the manufacture, and imploying of the Natives, and the Looking-glasses are sould better cheape by above 30l. in the 100 then at any time before, and the workemen therof likely to encrease daily, if encouragement be given to the Patent, and that Sir Robert Mansel hath not only to his great charge and losse trayned up severall Natives to make Glasse, but hath also given great allowances to the most expert worke-men strangers for every Native they have or shall teach, and that before Sir Roberts Patent there was never maintained in the whole businesse neere the one halfe of so many as now are.

That where before Sir Robert Mansell had the Patent, the greatest part of glasse that served the kingdome was imported, and some places of the kingdome not served, but many times without Glasse, Sir Robert hath not onely caused sufficient quantities to be made of all sorts to serve this kingdome, but could serve two kingdomes more, if it might be vented, and hath also caused to be erected 9. broad-glasse Furnaces in the several and most remote places of the kingdome from London, for the ease of the subiects charge in Cariage, and avoiding hazard of breaking, and to the end that all the subiects might be served a like, as neere as may be, so that where the Subiects have in many places used to pay sixe pence the foote for glasing, it will bee now done in any part of the kingdome for foure pence halfe peny the foote.

That all sorts of Glasse are as good, and most sorts much better, then hath beene usually made in England, and sould at no higher, and most of them at much under the rates they were sould at the last Parliament, albeit Sir Robert Mansell hath continually paid much more for workemanship, then is paid in any other part of Christendom; viz. that those large ordinary glasses which were then sold for sixe shillings the dozen, are now sold for foure shillings sixe pence, and the small ordinarie glasses which were then sould for foure shillings the dozen, are now sould for two shillings sixe pence, and morter glasses which were then sold at two shillings the dozen, are now sold for one shilling three pence, and the Christall beare glasses, which were then sold for eighteene shillings the dozen, are now sold for fifteene shillings, and the Christall Wine glasses, which were then sould at sixteene shillings the dozen, are now sold for twelve shillings, and the smallest Christall glasses which were then sold for twelve shillings the dozen, are now sold for tenne shillings the dozen, Looking glasse plates which were then sold for eleven shillings the dozen, are now sould at eight, and the dearest at tenne shillings, and the window glasse is sold at London, and at al the furnaces, for twenty two shillings sixe pence the Case, which is the verie price that long since the very Glaseirs appointed to give for the same, and every Case doth containe one hundred eightie foote at the least, and that Bunger and his Auncesters have sold glasse when they held the workes at thirty shillings the Case, and much worse conditioned, and lesse sised glasse, and yet they neither paid rent, nor ever underwent any great losse or hazard in the businesse. And for the greene glasse, that quantity which was about fourty yeeres since sold for tenne shillings, is now sold for foure shillings, and that all greene glasse, for the most part, is sold for the lesse by 50l. in the 100 since the Patent, then when it was made with wood.

The premises considered, Sir Robert Mansell beeing out of purse so great a summe, with so great hazard, before hee could by any meanes or industry settle the busines to the benefit of the Common-wealth; and his Maiesty taking the same into his Royall Consideration, as also the many and faithfull services of the sayd Sir Robert Mansell, by the advice of the whole body of his most Honorable Privy Councell, was graciously pleased to renew a Patent of priviledge to the sayd Sir Robert, as is before expressed: Wherefore he now resteth confident and humbly desireth that it will likewise stand with the pleasure of this Honorable House, to ratifie what is done according to his Maiesties most Gracious intention, and thereby free him of that heavy imputation of contempt, undeservedly cast upon him by the sayd Petitioners. Vivat Rex.

No. XXI.

State Papers, Domestic, Chas. I., Vol. 282, No. 99.

Cost, &c., sustained by Sir R. Mansel, 28th Jan. 1634 5.

Costs Charges difficulties and Losses sustayned by S^r^. Robert Mansell in the Busines of Glasse.

First he was out of Purse above 30000^li^ before it was brought to any state of substance, or could be perfected with Cole for the service of the Kingdome.

This was proved in the Parliament 19° Jac: and the Particulers thereof delivered to S^r^. Edward Cooke with a petic̃on under the hands of 300 workemen and Traders in Glasse for the Contynuance of the then Patente.

The particulers whereof did thus arise.

1. He paid yearly to his Matie. and 9 other Patentees 2800^li^ p ann̄ which amounted to 27500^li^, when he lost yearely neere as much by the workes, by the practises aswell of those workemen that were then here, being Natives, and all ill affected to the Patent, as of those that were brought into the Kingdome by S^r^. Robert Mansell.

Whose abuses were theis.

1. They wastfully consumed in one yeare 3600^li^ in Coles where 800^li^ yearly now ꝑformeth the service.
2. They wilfully and commonly melted downe the furnaces and dayly broke the Pots whereby the metall was Totally lost, and the furnaces being consumed his workemen and servants contynued a burthen to him and receaved dead pay; and his buildings which cost him 5000^li^, and the rents of his howses which were above 400^li^ ꝑ ann̄ were fruitles, and his stocke of materialls which was constantly about 5000^li^ lay dead upon his hand(, oftentymes by the space of six moneths together.
3. Thirdly by those mischiefes, and for that he could not be furnished with Scotch cole at any moderate rates (wherewith the Glasse was onely made) he was enforced to remove his work(from hence to Purbeck, and from thence to Milfordhaven in Wales, and from thence backe to London, and from hence the making of Window glasse to Newcastle upon Tine in respect of the rates of fewell, where his charge in building was 2000^li^ more; and if he had then failed in ꝑfecting the making of Glasse with Newcastle Cole (never before attempted) he should have beene enforced to have sitten downe with the losse of 36000^li^.
4. The great charge of Clay for his Pots, which his former losses enforced him to send for from beyond Paris in France and Spawe in Germany.
5. His great charge in prosecuting S^r^. William Clavell, Banger, Bennet and Wirral in the Exchequ^r^. and at the Councell table; who in contempt of the orders from the Board and Proclamac̃on, set up several workes and furnaces in opposic̃on of the patent.
6. He was at great Losse and charge in the Trayning up of English men both to fine the mettall and to make glasse.

Notwithstanding all which in the pet^rs. absence att Alguer the Patent was declared voyd by the Comons house of Parliament 19° : Jac.

The Consideracon of which charges and losses moved the late King to grant the Patente of 23°. May : 21 of his raigne for 15 yeares, w^thout rent but Liberty of Importacon.

Thereuppon before any fruit of that Patente, his workemen and servant^e were drawne from him and went into Scotland, and most of the glasse here vented imported from thence for diverse yeares, & then S^r. Robert Mansell to settle the Manufacture here was inforced to purchase in the Scotch patent at 250^li p ann̄.

After his men returned out of Scotland they made such ill condiconed glasse as at one tyme he lost 2000^li thereby.

By that meanes he was enforced to peure a whole new company from Mantua in Italie, for the bettering of the Condicon of his glasse, wch in 15 yeares before he could not effecte by the Venetians.

Then one Vecon his principall Clarke run away into France with his accompt^e and money, and by his procurement workes were there erected, and the greatest part of drinking glasses here spent brought in from thence, whereby the Manufacture was like to be lost.

For preservacon whereof the 25th of June, 8° Car. R̃s., an order upon solempne debate was made at Councell table to stop importacon, till when he reaped neither profit nor enjoyed peace for about 10 yeares.

He was since at exceeding great charge in pfecting the worke of Looking glasse and Spectacle glasse plates, which could not be settled here till the Venetians put in execution an ancient Law inhibiting the exportacon of them unwrought, uppon payne of personall imprisonment and confiscation of goode, whereby the Manufacture is here settled, and many hundred^e set on worke and maynteyned.

Notwithstanding all which, and his great losses and casualties at Sea, and breaking of glasse, which in some one yeare have bin above 1000^li, he never raised the price of glasse one penny, but in all sort^e hath fallen his prices (vizt.) from 6^s. to 4^s. the dozen, from 4^s. to 2^s. 6^d. the dozen, wch in 5000^li save the subjecte 1800^li in drinking glasse.

For Window glasse the price is now certeine and more moderate then form^qlie, albeit the Assize is more by 40 foot in ev^qie Case then formerly was used, and notwithstanding the price of the materialls is doubled.

And when he had receaved his Ma^ts. significacon of his Royall pleasure, uppon consideration of the p^qmisses for a new patent for 21 yeares, whereby he had comfort and hope to have been repaired in his fortune, & to have bin enabled to have yeilded his Ma^ty. 1000^li rent p ann̄, and yet to have enhansed noe prices, His men are againe drawne into Scotland, Glasse is attempted to be made in Ireland, and Crispe his Tenant endeavoreth to gayne a Branch of the patent and offers for ye whole. . . .

Of all which he humbly praieth the consideracon of his gracous Ma^ty., and submitteth the same with his life and fortune pstrate at his Ma^ts. feete.

No. XXII.

State Papers, Domestic, Chas. I., Vol. 418, No. 90.

Sir Robert Mansel to Nicholas, 30th Apr. 1639.

Worthy S^r^.

I acknowledge my selfe much honored by the Lords answer to ye saltpeeter mans petic̃on & complaynt against mee & much indebted to yo^u^ for giving mee perticuler notice thearof. Touching my owne Justification I shall say little till I attend the Lords, when I shall bee much ashamed if I do not make it appeare y^t^ I have neglected myselfe in poynt of creddit & proffit to advance the saltpeeter works: & that I have given noe cause at all of complaynt: & that I have done nothing for the furnishing of his Ma^tys^. Glass workes with ashes but what shall bee warranted by the Broadseale of England after severall debates at Councell Boorde, & to the present contentment of the whole Kingdome; & if the saltpeeter men bee not served as they ought to bee, it happens ouly through their owne default^t^.

As towching the buissines it selfe, I am soe well acquainted with every branch of it, with the perticuler dispositions of the saltpeeter men, & the consequence of y^t^ service; wch deserves I confess precedent countenance, & yet uppon examinac̃on theare will appeare greate necessity to uphold the other. But the trueth is, y^t^ both the work^s^ may bee upheld & better served then now they are (to his Ma^ts^ greater honor & proffit, & ye absolute contentment of the subject) if the saltpeeter men will but submit to order, wch I do dispayre of unless ye Lords will bee pleased to heare us face to face, and require our obedience to what they in their wisdome shall determine; & y^t^ shall bee my humble suit to their Lo^pps^, & earnest request unto yo^u^ for yor furtherance: wch I shall studdy to requite & appeare

yor thankful frend to serve yo^u^

Robert Mansell

From my house at Greenw^ch^.
the 30th Aprill 1639.

[*Addressed*] To my much honored frend
M^r^. Edward Nicholas one of the
Clarks of his Ma^ts^ most hono^ble^. privye
Councell at Kingstreet in Westminster.
these present.

[*Endorsed*] R. 1° May 1639.
S^r^. Robte Mansell in aunswer to
M^r^. Heirik his pet^n^. touching Ashes.

No. XXIII.

British Museum, MS. 669, f. 4 (7).

Suit or Petition of Sir R. Mansel to the House of Lords, [1639?].[1]

The True State of the businesse of Glasse of all kindes, as it now standeth both in the price of Glasse and Materialls, how sold these fifteen yeers last past, and how formerly, The

[1] This document appears to be a part of Mansel's "Humble Suit" to the Lords alluded to in the preceding document. It was communicated by Mr. H. Halliday Sparling to *Notes and Queries*, Oct. 24, 1891.

price of Materialls as they are now bought, and what hath been formerly paid, with a report of the condition of all kindes of Glasses.

Ordinary Drinking-Glasses—For Beer, sold formerly for 7^{s} 4^{d} and never under 6^{s} per dozen are now, and have been for 15 yeers past sold by me, for 4^{s} per dozen.

Ordinary Drinking-Glasses—For Wine, formerly sold for 4^{s} per dozen, have been, and are now constantly sold by me for 2^{s} 6^{d} per dozen.

Mortar-Glasses[1]—Formerly sold for 2^{s} per dozen, and are now sold by me, for 1^{s} 4^{d} per dozen.

The Materialls for the making of these severall kindes of Glasses formerly bought by me for 20^{l} per Tun, and many times under, do now, and have for divers yeers past cost, 25. 26. 27. and 30^{l} per Tun.

Cristall Beer-Glasses—Formerly brought from Venice have anciently been sold for 20. and 24^{s} per dozen without Covers, and are now sold by my Merchant for 10^{s} per dozen, and 11^{s} of extraordinary fashions.

Cristall Wine-Glasses—Formerly made and imported from Venice, were sold for 18^{s} per dozen, and are now sold by my Merchant for 7^{s} and 8^{s} per dozen.

Cristall Beer-Glasses—Made by me (which never were before in this Kingdome) and of all fashions that are desired and bespoken, were heretofore sold for 18^{s} the dozen, and are now sold for 9^{s} the dearest.

Cristall Wine-Glasses—Made by me, were formerly sold for 16^{s} per dozen, and are now sold for 5^{s} 6^{d} per dozen, and the dearest being of extraordinary fashions for 7^{s} per dozen.

Looking-Glasses[2] and Spectacle-Glasse Plates are likewise made by me here in England, being undertaken and perfected by me with great charge and hazzard, and the expence of twenty yeers time, which work I did the rather undergo in that I understood, the State of Venice had restrained the transportation of that Commoditie rough and

[1] Mortar glasses were small vessels like saltcellars to contain greese and a wick. They served the same purpose as rushlights in Sussex. *A mortar* has survived to the present day to signify a night-light. No old examples have fallen under the author's notice, known with certainty as such.

[2] Detailed information concerning the making, grinding, polishing, and silvering of looking glasses, together with exhaustive Tables showing the value, duties, risk, and profit with regard to rough and finished plates is contained in "The Plate-Glass-Book, by a Glass-House Clerk," Edit. 1784.

The prices in the above document may be compared with those in the following paper of eighteen years before; and of previous dates. British Museum Add. MSS. 12496, p. 165.

Statement of Mansel Dec. 1621 to the Parliament.—Verselyn who paid nothing to the Queen sold his ordinary glasses for 7/– the dozen; the large and ordinary small for 4/– the dozen besides plates at 7/– the dozen. Sir Jer. Bowes continued his prices, but paid the Queen 200 marks per Ann. Under his second patent renewed for his life and 3 years after, he paid the same rent and sold his large glasses for 6/s and 4^{d} the dozen, and his small for 4/– the dozen and his morters for 4/– the dozen.

Under the sea coal patent the annual rent of £1000 was reserved to the Crown, £1800 to previous patentees and 280 and fourscore pounds for the houses fitting for the glasse works. Yet Mansel's rates were lower than his predecessors, viz. large glasses sold by Verselyn at 7/– doz. are sold by Mansel at 6/– the plates at 7/– per dozen Mansel sells at 4/– Verselyn morters at 4/– Mansel at 2/– And as concerning looking-glasses Sir Robert Mansell hathe brought to such perfection that he hath caused our Natives to be so fully instructed and taught therein that the said glasses are now here made which was never wont to be in England aforetyme, so that thereby we hope in tyme to set many hundreds on worke which many of those who do import have never done here but beyond the seas.

As for window glass I will approve by the glasiers of London which have used the most glasse that there was never better nor larger sized glass made by Bunger or any other with wood & sold constantly for xxii sh. by the case which is the price the Glaziers did usuallie pay before the patent. All my promises they will justify when the noble House of Parliament shall commend them yet Bounger never paid penny rent & Sir Robert three thousand and odd pounds per ann.

All which I most humbly submit to the grave wisdom of this most Ho^{ble} House of Parliament.

Endorsed
reasons for ye defence of ye glass patent 21 Dec. 1621.

Instruction concerning the patent of glass making for the right ho^{ble} M^{r} of the Rolles.

unpollished upon pain of confiscation, and other heavy punishments, in respect the grinding, graving, pollishing, and foyling thereof doth imploy great numbers of poor people, and afford them maintenance, which benefit doth hereby redound to the Natives of this Kingdome.

Window-Glasse—Is made of English Materialls, as Ashes, &c. And though the price of Ashes, is of late yeers raised from 6. 7. and 8^{d} the Bushell to 9. 10. and 11^{d} the Bushell: And although the measure of this sort of Glasse heretofore was ever uncertain, And that the number of feet formerly contained in each Case of Glasse, did greatly differ, As sometimes the Case contained 120 feet, sometimes 140 feet, and never above 160 feet; Now each Case in the measure is reduced to a certainty, always containing 180 feet, And the price also certain at 22^{s} 6^{d} per Case, at the Furnace doore, which containing as before, amounteth but to threehalfpence the foot at the most. All Window Glasse in this Kingdome is sold for the price aforesaid except a small quantity made by me at Woolwich, which work I erected to prevent any scarsety of Glasse that might happen in the Winter time, And notwithstanding I ever sold the Glasse made there to my great losse and hinderance.

Green-Glasses—Of all sorts are made likewise of English Materialls, which works after I had sustained great losse, and undergone great vexation (in the disposing of them) I let to a gentleman of known honesty, and of experience in Glasse, and a man every way responseable for any errour that can be laid to his Charge, And though I know his Materialls, and Fewell are dearer then in former times, yet I did never hear of any complaint of his carriage, nor of any price raised by him of his Glasse either in the Citie or Country, But that he sold his Glasse at the rates which were many yeers since set down by the agreement of all the Glasse-sellers, and Glasse-makers.

The whole Manufacture of Glasse with Sea-coale, and Pit-coale hath been perfected and preserved in this Kingdome by me, with the expence of above 30000l. of my Fortune, whereby the great consumption of Tymber and Wood is prevented, Many thousands of the Natives of this Realm are imployed and maintained, who (if liberty of importation of forraign Glasse should be permitted) must of necessity be deprived of their means of livelihood, and many others of the Natives are brought up and instructed in the Mystery of Glasse-making, besides the great summes of money paid for wages in the severall branches of the Manufacture, are retained in the Kingdome. There are also many other great benefits that accrew to the Common-Wealth from these branches of His Majesties grants to me, All which particulars, received a full and deliberate hearing, and examination in the Parliament held in Anno 21°. Jacobi Regis. And His Majesties said grant was then priviledged by a speciall Proviso in the Act of Parliament then made, with the generall approbation of both Houses, As by the said Act may appear.

From the consideration of all which reasons I have taken humble boldnesse to tender my suite by way of Petition for a speedy hearing and examination of the Premisses which I beseech you, to further, when it shall be presented.

No. XXIV.

State Papers, Domestic, Chas. II. (30th June 1663).

To the Kings most Excellent Matie.

The humble petic̃on of George
Duke of Buckingham

Humbly sheweth

That y^r pet^r. hath longe Imployd many workemen, & beene at very greate expences, in Tryalls, & experiments to finde out the Art, & Mistery of makinge Lookinge Glasse Plates, (a Manufactory not knowne, nor euer heretofore vsed in England) And of late forbiden by the Venetians, to bee Exported from thence (vnlesse first wrought & Pollisht,) to the vndoeinge of many Families in London, wholly subsistinge vpon making, & Grindinge Lookinge Glasses, & Spectackles & other workers of Glasse, And y^r Pet^r beinge now ariued at soemuch perfection in the s̃d Art that hee is able to furnish all yor Ma^ts Dominions, & other parts alsoe, with as good (or better) than any brought from Venice, & at as Cheape Rates.

Humbly Prayeth

That yor Matie wilbee gratiousely pleased, to grant that y^r pet^rs Patent for makinge of Christall may bee renewed, with a Clause therein for the sole makinge of Lookinge Glasse Plates, Glasses for Coaches, & other glasse Plates for, & duringe, the Tyme vsually granted by yor Matie & yor Royall Progeneto^rs for encouradgm^t of all such as haue beene the first discouerers, & promoto^rs, of any such worke as this, Tendinge to the benefitt, and aduantage, of yor Ma^ts Subjects, That soe y^r pet^r may receaue som Recompence for his Greate, & chargable, vndertakinge, & bee encouraged to proceed therein

And y^r Pet^r shall dayly praye &c.
[signed.] Buckingham.

Att the Court at Whitehall the 30th June 1663.

His Ma^ty being graciously enclined to encourage the discouery of new arts & inuenc̃ons, & the further improuem^t of such as are already in use, is pleased to referre this hon^ble Petic̃oner to M^r. Atturney G̃all, to consider of his request and to certify his Opinion what is fitt & agreable to Law for his Ma^ty to doe in it. And then his Ma^ty will declare his further Pleasure

[signed.] Henry Bennet.

[Endorsed] D. Buckingham.

May it please your most excellent Ma^ty

In obedience to your Maties refference vpon this Petic̃on, I haue considered thereof, and doe humbly conceaue, that your Ma^ty may by law grant to the Petic̃on^r the priuiledg for the Sole making of looking Glasse plates, as is desired, for the terme of fowerteene yeares, if it be a new Inuenc̃on, as the Petic̃on^r affirmes; and I can finde nothing to the contrary, And it is vsuall in these cases, to incert a Prouisoe, for reuoking the Patent, if it shall apeare to be of publiq^e preiudice, or not a new Inuenc̃on;

20° July 1663.

All wch is humbly Submitted &c.
[signed.] G. Palmer.

No. XXV.

State Papers, Domestic (Entry Book 15, p. 141, 4th Aug. 1663).

New Inuencon to Mr. Powlden &c.

Our will & pleasure is, that upon surrender of a grant made by Vs vnto Martin Clifford & Tho: Powlden Esq^rs of the benefitt of their Inuencon for the making of Cristall Glasse w^th^in Our Realmes you forthw^th prepare a Bill, fitt for Our Royall signature to passe Our great Seale conteyning Our grant unto Thomas Tilston of London Merchant his Executo^rs & assignes, by him selfe seruants or agents not only of the sole makeing & venting of the said Cristall glasse, but also of looking Glasse plates of all sorts of glasse w^tsoever wch shall be made in any Our Dominions for the terme of 14 yeares, according to the statute in that behalfe it being a new inuencon, & Manufacture wth such Clauses & prouisoes, as in Our sd former grant were conteyned. And for &c. dated August the 4th 1663.

To Our Attorny Grall.

No. XXVI.

State Papers, Domestic (21st Aug. 1663).

To the Kings most Excellent Matie.

The humble petition of Bryan Leigh Adam Hare William Broughes and Ralph Outlye

Sheweth

That whereas your Pet^rs at their great charge and trouble have found out a way never yet before discovered, of extracting out of Flinte all Sorts of lookeing glasses, plates both Christall and ordinary and all manner of Christall glasse, farr exceedeing all former experiments both at home and abroad.

And forasmuch as it hath been customarily the gratious pleasure of the Kings and Queenes of England for the encouragement of the persons makeing such new discoveryes to gratify the Inventors thereof with a Pattent for 14 yeares gratis.

They therefore humbly pray your Ma^ty^ would bee graciously pleased to grant your pet^rs^ a Pattent for the said terme of 14 yeares with prohibition to all other persons for endeavouring the same Art, to prevent the defrauding of all other your Maties subiects

And your pet^rs^ shall ever pray &c.:

[not signed.]

Att the Court at Whitehall Aug. 21, 1663.

His Ma^ty^ remembring something of this nature to be already passed to his Gr^ce^ the Duke of Buckingham, is graciously pleased to referre it to M^r^. Atturney Generall, to consider of this Peticon, and to certify his Opinion in it. And his Ma^ty^ will then declare his further Pleasure

[signed.] Henry Bennet.

[Endorsed]

The Peticon of M^r^. Leigh &c.

No. XXVII.

State Papers, Domestic (Docquet 1663, September 4).

A Grant vnto Thomas Tilson of London Merchant his Executors administrato^rs or assignes of the sole vse & benefitt of his Invencon of making & venting of Christall glasse & Looking glasse plates of all sortes of glasses whatsoever within his Ma^tes dominions, for the terme of 14 yeares according to the Statute in that behalfe; With such Clauses & Provisoes as are vsuall in grantes of like nature; Subscr by M^r. Attorney gen^rall vpon significacon of his Ma^tes pleasure vnd^r his Signe manuall Procur by M^r. Secretary Bennett.

[signed.] Sidney Bere.

[Endorsed] Septemb^r the 4th 1663
Docq^t.

No. XXVIII.

State Papers, Domestic (Proclamations, 1660-1665, volume 2, p. 169, 25th July 1664).

By the King.

A PROCLAMATION

for the Prohibiting the Importation of Glass-Plates.

CHARLES R.

Whereas it hath ever been the great care and wisdom of Our Royal Progenitors, Kings and Queens of this Realm, to give all due encouragement to the Manufactory thereof, by which so great a part of the Nation have been susteined, and upon all occasions rendred serviceable to the Crown, both in times of War and Peace: And therefore hath been the wisdom of this Nation to provide upon all occasions against the Importation of Foreign Manufactures, tending to the decay and prejudice of those used and exercised within this Realm. We therefore taking into Our Princely Consideration the great usefulness and commodity of Making and Working Looking-glass-Plates, and other Rough and Wrought Glass-Plates, within this Our Kingdom of *England*, a Manufacture lately found out, and brought to perfection by some of Our Natural *English* Subjects, and of the great benefit that will thereby redound both to Our Self in the increase of Our Revenue, and to all Our loving Subjects in general, especially the Artificers that deal in, Make and Work the said Plates; which in short time will become the support of many Families of Our good Subjects, if the said Manufacture receive due encouragement from Our Princely Care thereof; And especially if the Importation of such Glass-Plates from other parts beyond the Seas into this Our Realm be restrained. And We being given to understand that very extraordinary quantities of the said Glass-Plates have been brought into this Our Kingdom since the said Invention of Making them here by Our Natural Subjects hath been exercised and known, on purpose (as is very probable) to fill the Markets therewith to the end the Inventors and Makers thereof may be discouraged, and the said Manufacture wholly laid aside: which nevertheless, for encouragement of Our Subjects Industry in this and the like Inventions, We hold necessary to be supported. And whereas the Inventors, and other persons concerned in the Management of

the said Manufacture in this Our Kingdom, have undertaken and engaged to furnish Our Subjects therewith, at as low, or cheaper Rates then formerly; the due performance whereof We do and shall expect from them accordingly. And do hereby Require and Enjoyn the same. We do therefore by and with the Advice of Our Privy Council, by these presents, straitly Charge, Prohibit and Ordain, That from and after the Tenth day of *September* now next coming, no person or persons, Native, Denizen, Alien or others, shall Import, Bring, Send, or Convey, or cause to be Imported, Brought, Sent or Conveyed into Our said Kingdom of *England*, Dominion of *Wales*, or Town of *Berwick* upon *Tweed*, or any part thereof, from or out of any the Realms or parts beyond the Seas, or out of any other of Our Kingdoms or Dominions, any manner of Glass-Plates, either Rough or Wrought into Looking-glass-Plates, Spectacles, Burning-Glasses, Tubes, or any other form or fashion of Glass-Plates whatsoever. And further, That no person or persons whatsoever aforesaid, that now use, or hereafter shall use the Trade or occupation of Retailing, Selling, or Uttering Looking-glass-Plates, Rough Glass-Plates, Spectacles, Burning-Glasses, Tubes, or other Wrought Glass-Plates whatsoever, within any of Our Kingdoms or Dominions, shall at any time hereafter directly or indirectly Buy, Bargain or Contract for or concerning the Importation of any Rough Glass-Plates, or Plates wrought into Looking-glasses, Spectacles, Burning-glasses, Tubes, or other Wrought Glass-Plates whatsoever made beyond the Seas, or in any other place out of Our said Realm of *England*, and Dominion of *Wales;* Nor shall Bargain for, Buy or Sell such Glass-Plates so Imported, knowing the same to be Manufactured beyond the Seas, upon pain of forfeiting all that by Law is forfeitable, and such other punishment as by Our Law or Prerogative-Royal may be likewise inflicted upon the Contemners of Our Royal Authority; Any Charter, Licence, Power, Authority or Priviledge to the contrary notwithstanding. And We do hereby further straitly Charge and Command all Sheriffs, Justices of the Peace, the Farmers of Our Customs, Comptrollers, Searchers, Waiters, and other Officers in Our Port, or Ports within our said Realm, and all Constables and other Officers and Ministers of Justice, and all other Our loving Subjects, to be diligent in and about the preventing of the Importation of the said Manufacture, and discovery of the same; if, any such shall be Imported, and to cause such the Offenders to be duely punished as to Law and Justice shall appertain.

Given at Our Court at *Whitehall*, the Five and twentieth day of *July*, 1664, in the Sixteenth year of Our Reign.

God save the King.

London,

Printed by *John Bill* and *Christopher Barker*,
Printers to the Kings most Excellent Majesty, 1664.

No. XXIX.

Sloane MS. 857, Papers relating to the Glass-sellers.

Letters from John Greene to Allesio Morelli glass-maker in Venice, 1667-1672.

No. 1.

London, December the 12th 1667.

Sr Yours of the 4th November last was received, and wee thank you for your redij care (you express) to observe and performe our last order: and S^r^ wee desire you to take the same care to get us a few more glasses made, (and added to our former order and sent with

them) according to the number and forms herein expressed: and also to pack up with them 4: dozen speckled enameld beer glasses and 6: dozen dijto for wine: the fashions of these wee leave to you, onelj Lett them be all with feett and most with ears & of good fashions, we supose this order containing 90: dozen of glasses may be packt in one large chest, but if not Lett the remainder be packt in a small chest, S[r] wee hope wee need not to saij any more to you, but to Lett you know, that wee shall credjt our selves soe mutch as to honer your Bill or Bills with punctuall paijment: which is all at present from your Humble servants

M. M. & J. G.

S[r] if it should hapen that you can not get the first good shipe that comes to London to take in all our chests of glasses at a reasonable freight: we desire you to send us two or three chests by the first (because we verij mutch want the glasses) and the remainder by the next opportunitij.

No. 2.

London, August 28 1668.

Sr—our Respects being presented unto you, thease maij Certifije that we have Recevied the five chests and one small box of Venice glasses that you consigned unto us and as to the Contents their of, theij wear wright for Number according to the factorij, but the beere glasses were something smaller than the patterns and as to the chest No. 5 it was almost quite spoijled it had Receveid much wett which had rotted the glasses, and wee suggest it was wett before it was shipt for the Master of the ship and all his Men doe Afirme that it did receive noe wett sense it came in to their Coustodij, and therfore wee coud gett noe satisfaction from them, the box of enamld glasses weare deere and the worst that ever wee had the Couleurs were verij bad and wear laijd to thick and ruff praij lett these wee have now writ for bee better, also another great fault was the Chests were mutch smaller then ever we had anij; for whole Chests, theij used to be six inches Longer and six Inches wider and woud have held 20 or 30 dozen of the same sizes more than theij did and yett theij paid the full freight of two halfe chests which hould manj more also the chests were not well hooped and naijled; as to the Lookeing glasses thej also were wright for number and the most of them for Measure onely some of them were smaller size than theij shud bee, pry be pleased to take care that theass faults bee Amended in this parcel wee now send for: which wee desire you to porvijde for us and to send with all possible speede bij the first good ship that is a free ship wee woud willingly have them heere in Januarij next if we possiblij we can. S[r] praij observe the directions under written very exactlij that wee maij Receive noe damaighe for want of your care, and if you please to draw a bill a pone us wee shall make good paijment, and According to your kind usaighe we shall be obliged to give you further order the number of the two sheett of drinking glasses Amounts to 500 dozen which we hope will be packt up in five large chests, if not put the rest in a halfe chest and if anij are wanting fill it upp with glasses of the same patterns but lett the enamld glasses bee putt into a box by them selves with a few bundles or Masts of pearle neck laces according to order, this is all at pr'sent from

Complaints
1st.
2nd.
3.
4.

your ffrinds & servants

Michall Meseij

John Greene.

Directions 1st that the drinking glasses be made of verij cleer whit sound mettall and exact according to the patterns both for size fashion and number and of noe other sorts or fashions.

2nd that the Chests bee full size well hooped & naijld and the Marke in the Margent put apone them as well one the Lid as one the end to prevent the seamen setting them with the bottoms upward.

3rd that you send Agen dwall factorij and also 3 other factorijs Apart bij themselves that is to saij for the drinking glasses & enameld glasses & neck laces bij themselves in one factorij and the Looking Glasses that are pakt in the bottoms of the chests Apartt bij them selves & praij put not your small printed papers Apone the tops of the Chests but one the tops of the boxes that theij be not seene when the Chest is opened and Lasst Lij Lett them be sent bij the first good & sure ship for wee would wrather give 5 8 or 10s pr Chest extra ordinary ffraight than want them in ffebuarij or March next at furthest.

The Contents of the Lookeing Glasses &c.

3 : glasses dimt & cutt off	¼ ½ Lana	Lett but 4 of thease bee Putt in a box least thej be broken. Lett all thease be putt in the bottoms of the chests of drinking glasses & the chest well najld & hoopt. Lett all bee unfoijld.
4 : glasses of	¼ Lana	
8 : glasses off	¾ & ½ Lana	
6 : glasses of	¾ & ½ Silke	
6 : glasses of	¾ Lana	
6 : glasses of	¾ Silke	
12 : glasses of	¾ ½ Lana dimt	Lett all theese bee packt in small boxes and then putt in a strong casse and markt as in the Margent. Unfoijld.
12 : glasses of	¼ ½ silke dint	
12 : glasses of	¾ Lana dint	
12 : glasses of	36 dint	
24 : glasses of	28 dint	
60 : glasses of	No. ⅄ plaine & shortt	
60 : glasses of	No. ⅄ plaine but long	

1 : dozen of speckled enameld coverd beere glasses	I have not draune pattern for these. But Lett them all be made with feet and ears of good hansom fashions & packt bij them selves in a small box or case & markt as in ye Margent.
1 : dozen ditto un Coverd	
1 : dozen Clouded calsedonia coverd beere glasses	
1 : dozen ditto uncovered	
2 : dozen enameld Coverd Clarett glasses	
1 : dozen Clouded Calsedonia Covered clarett glasses	
2 : dozen enameld Covered sack glasses	
1 : dozen Calsedonia Sack glasses	
4 : dozen speckled enameld Clarett glasses	
2 : dozen Clouded Calsedonia Clarett glasses	
4 : dozen speckled enameld Sack glasses	
20 beere	
500 in ye sheet of patterns.	
Tottall 520	

No. 3.

Senior Alleisio Morellj.

London, September 17, 1669.

Sr—Our Respects presented unto you, wee have heer Jnclosed sent you our patterns for a parcell of drinking Glasses and a few false pearle neck laces, which we desire you maij bee sent us with all convenient speed apone the first good free ship that presents, and that speciall care bee taken in the provijding them according to our directions under written and to the well packing them up, for the last wee Recevied from you out of the John & Thomas and Affrican manij of the Chests weare verij Ill Conditioned for their was above forety dozen broken and some of the chests had Taken watter which does staijne and rott the Glasses, and wee could not see how theij could take wett after theij wear shipt for both the ships wear in a verij good Condition soe that we supose your servants lett the chests stand out in the raigne after theij wear packt, and therefore we hope you will freelij make us some sattisfaction for the damaige we Recevied therbij, and order more care to be taken for the futer (and therfore Sr we desire you exactlij to observe our directions under written in all respects) that wee maij have noe cause to Complaine. Their is of all sortts 600 : dozen of drinking glasses but if you cannot procure the whole parcell redij to send by the first good free ship, then send us 2 or 3 chests or what you can get redij and lett the plaine glasses (as in the Margent) be

first made in a redijness for them wee want most espesallj, and also we desire now that noe Lookeing Glasses be packt in the bottoms of the chests of drinking Glasses, but wee woud have them verij carefuly packt in one or two strong Cases as you shall see most Convenient for securitj from danger of Breakidge with the box of false pearle neck Laces with them, and Sr further wee desire you to send us Two facterijs, and in one of them to nominate and prize those 18: glasses of $\frac{3}{4}$ $\frac{1}{2}$ silke and those 24 glasses of 14 or $14\frac{1}{2}$ Inches English Measure and those 18: glasses of $\frac{3}{4}$ all as 60: n°/36: and nominate and prize the 18: n°/36 as 18: n°/28 (for other waijs wee must paij 2 shillings 6 pence a peece duties for everij size above the n°/ Thirty sizes which if wee shoud theij woud be deerer to us than wee can buij heer) and alsoe to enter shortt of the true number of everij chest of drinking Glasses ten dozen for the Custome is also verij high apone them, and praij Sr Lett us heere from you when you have Recevied these lines as alsoe when you shall have shiped all or anij of them, and then you maij please to draw your bill or bills Apone us (as formerlij) and wee shall make good and punktuall paijment there oft, Thus not dowting of your uttermost care and kinde useaighe we take our Leaves and rest your ffrinds & servants. (no name.)

Sr Wee praij you most Carefully to observe these directions under written.

1st That all the drinking Glasses be well made of verij bright cleer & whit sound Mettal and as exactlij as possible may bee to the formes for fashion size and Number and that noe other fashions or Sortts be sent us but this one patterns onlij.

2° That the Chests be strong Large whole Chests, well hoopd and naijld and Markt and Numberd as in the Margent at one end of everij chest and also apone the Covers or Lids, to prevent the seamen from setting the Lid or upper part of the Chest undermost and to be sure theij be all verij well and Carefullij packt up and with thorou drij weeds, for if the weeds be not well drijed or doe take anij wett after theij be packt theij staijne and spoijle the glasses.

3^{dlj} That the Lookeing glasses bee all verij good Cleer whit Mettle and Cleere and free from bladders or great sands or anij other blemishes or faults whatsoever and that theij bee verij Large sized for the sortts, for manj of your last y^{t} you sent us wear verij small size espesallj y^{or}

N°/χ N° 17: N° 28: N°/36 & of $\frac{3}{4}$.

4th That the Neck Laces be of a verij Good Couller and Longer than the last weare.

5 Remember to send 2 facterijs.

Wee desire you to send us these sortts and numbers of Lookeing Glasses under written all of them unfoijld or unsilverd & doe not mention ye number apone ye Lids.

12: Verij good dimt (*i.e.* diamond) cutt glasses of $\frac{3}{4}$ $\frac{1}{2}$ Lana measure.
12: detto of $\frac{3}{4}$ $\frac{1}{2}$ silke Measure.
12: detto of $\frac{3}{4}$ Lana.
12: ditto of $\frac{3}{4}$ Silke & 6 18: or $18\frac{1}{2}$ Inch glasses.
12: detto of $\frac{3}{4}$ $\frac{1}{2}$ Lana Measure or nere for we have small size enough.
18: detto of $\frac{3}{4}$ $\frac{1}{2}$ silk.
24: glasses of 14 or $14\frac{1}{2}$ inches long English Measure dimt cutt.
18: glasses of $\frac{3}{4}$ dimt cutt.
18: glasses of N°/36 dimt cutt.
18: glasses of N°/28 dimt cutt.
90: glasses of N°/17 dimt cutt.
60: glasses of N°/χ dimt cutt.

Thease all dimt cutt but not anj foijle or silvered.

60: glasses of N°/17 Long pistolas plaine.
90: glasses of N°/17 shortt.
120: glasses of N°/χ shortt.

Thease all plaine.

Praj Lett these Neck Laces be Longer than the last for thej wear to shortt.

20 bundells of fine good pearle.
10 bundells of fine midle pearle.
10 bundells of fine small seed pearle.
In all 40 bundells.

Beer Glasses	300
Clarett	120
Sack	080
Tumblers of all sortts	080
Toijs &c.	020
	600 dozen

No. 4.

Seni[r] Alleiso Morrellj.

London, ffebruarij 10th $\frac{1670}{71}$.

S[r] Mij Respects presented unto you I did formerlj Accquaint you that I Recevied all mij last orders though not verrij well Conditioned, especiallj the Looking Glasses for truelj manij of them were neither good glasses nor there due and useal sizes for there was some Charged for glasses $\frac{3}{4}\ \frac{1}{2}$ that Indeed wear but $\frac{3}{4}$ and some said to be $\frac{3}{4}$ that ware but $\frac{3}{4}\ \frac{1}{2}$ and soe manij more likewise of the smaller sized were under size and measure, S[r] I know not wheither you saw the glasses examined when theij wear packt upp, but if you did not, both you and I wear abused to the vallew of a bove a 100 Livers, ther fore I doe realj expect now in this parcell one or two glasses to the vallew of 100 Livers at Least, for sattisfaction, or else trulj you will discouraighe mee for the futer to send to you (or anj other person at venice) for anij more Lookeing Glasses sence wee have so good made heer in England, and soe manij also of Venice Lookeing Glasses In London to be sould soe Cheape, for I assure you I have bought some Cheaper heer then my last I had from you stand me in, but in hopes that you will now use me extraordinarij well in a nother parcell both as to the goodness the size or measure and the price of them, I have been under written for a nother small parcell of Lookeing Glasses and also of drinking glasses, which I desire you to gett made and shipt for mee with all convenient speed Apone the first good ship or ships that come for London, but if you can not well get them all redij for the first ship or ships that comes for London then I desire you to send what you can gett redij of them, though it bee but one or Two or Three chests and also some of the Lookeing Glasses, and Indeed unless you ship them apone a verrij good & stout ship I had rather you shoud ship them Apone Tow ships then all in one, because of the danger of the seas and for fear of the Turkes, S[r] I praj order all the drinking Glasses to be made exactly according to mij Inclosed patterns and packt upp in deepe halfe chests such as you sent Mr. Richard Sadlers in, but I praij S[r] see that theij be packt with verij drij weeds for Mr. Sadlers Last six chests of glasses were much damaighed bij wett weeds, but I shall saj noe more for further directions heer but Reffer you to mij Generall directions over the Leafe, which I praj Remember to observe, S[r] I must begg the Trouble from you to send mee 2 facteries (as you did Last time) and to omitt 6 or 8 dozen of drinking glasses in every chest, and I desire you to put in the 24 glasses of $\frac{3}{4}\ \frac{1}{2}$ in the bottoms of two of the chests of drinking glasses but I praj Lett me know bij your letter to me what chests thej are putt in, by ye number, that I maj take the greater care of chests, I would also have you in your second ffacterj a Little Lessen the number of Lookeing glasses and to nominate or call those of $\frac{3}{4}$: glasses of 2 qrs. & $\frac{1}{2}$: and those of 2 qrs. $\frac{1}{2}$: glass of $\frac{2}{4}$: and those of 2 qrs.: call 36[s]: that heer bj I maj save A Little money in the duties of them for indeed the duties are soe high heare

that makes us use this waj else thej woud not be worth ye sending for if we paid full duties, and thej are soe strikt that thej will see our facterij so y^t I doe Intend only to show your second facterij, which I pray lett it be soe well contrived that their maj not be evident cause to mistrust it, The Lookeing Glasses putt in a strong case bj them selves, I woud desire you to send mee 50 Bandes or Masts of fine pearle neck Lacces or Braclett but Indeed ye Last you sent cost one Liver a Bundle to much I hope you will send me the Largest and best for 7 Livers a bundle Mij ffrind Mr. Van Mildert complaines you use him hardlj in those neck laces you sent him for you charged 100 Mast at 6 Livers a Mast and ye other 100 at 7 Livers which he says were noe better, praj also send me 6 or 8 such bruses as you sent Mr. Van Mildertt, and if you can convenientlj send mee a few fine ebonj and Ivorj small hour glasses I woud not have you laj out above 50 or 60 Livers in them Lett them be put up with ye bruses praj Lett all mij drinking Glasses bee made presentlj but gett mad the plaine round bottom glasses first that most of them if you send tow or 3 chests first, may come with ye first and a few of those with a pla ring also for I want these 2 sorts most drawn here for y^r sight some for beere some for french & some for Spanish wine, you will also now Receive a Letter with orders for Mr. Allen which I hope you will take care of for him, also, S^r I praj Lett mee heer from you when you have Received this Letter and when you have shiped them you maj draw your bill or bills Apone mee and thej shall be Accepted & punctualj paid Thus not douting of your uttermost care and kinde Usaighe in everij partikeler I Take my Leafe and remaijne yor Loveing ffrind

John Greene.

When you wright to mee, Direct yor Letter: ffor Mr. John Greene at ye Kings Armes in the Poultrij London.

S^r I praj take notice of these Genl Directions Under Written.

1st That all the Drinking Glasses bee verij well made and of verrij Bright cleer & whit sound Mettall as exactelij as possible maij bee to the formes for fashion size and Number and that noe other fashions or sorts be sent but those correspondant to mj patterns heere Inclosed.

2^d That the Drinking Glasses be packt upp with drij weeds in good strong Deepe halfe Chests but praj Lett them be made good Large size halfe Chests and well hooped & naild and markt and Numbered as in the Margent as well apone the Lids of the Chests as at ye ends that the seamen may know the Lids from the bottoms.

3 That the Lookeing Glasses be all verrj good Cleer whit Mettle and Cleer and free from Bladders or great Sands or anij other Blemishes or faults what soe ever and that thej be Large size for the sortt for manj of ye Last you sent wear much under size.

4th That the Neck Lacces be of a verrj good Culler and Long.

5 Remember to send tow Facterijs the 1st Right ye 2^d wrong.

I desire you to send mee thease Lookeing Glasses under written and all of them I woud have unfoijled I meane noe silvering apone anij of them and the largest especallij good thick strong Glasses fitt for Coaches.

2 : verij good glasses of $\frac{1}{4}$ $\frac{1}{2}$ and 3do of $\frac{1}{1}$.
12 : verij good dimant Cutt glasses of $\frac{3}{4}$ $\frac{1}{2}$ Lana Measure 24$\frac{1}{2}$ Inches English.
12 : detto of $\frac{3}{4}$ $\frac{1}{2}$ silke measure 22$\frac{1}{2}$ inches English.
12 : detto of $\frac{3}{4}$ Lana measure 21 Inches english.
12 : detto of $\frac{3}{4}$ selke measure 19$\frac{1}{2}$ Inches english.
12 : detto of $\frac{3}{4}$ $\frac{3}{4}$ y^{t} is 18$\frac{1}{2}$ Inches english measure.
12 : detto of $\frac{3}{4}$ $\frac{1}{2}$ Lana y^{t} is 17 inches english measure.
12 : detto of $\frac{3}{4}$ $\frac{1}{2}$ silke measure 15$\frac{1}{2}$ Inch english.
12 : dettj of $\frac{3}{4}$ $\frac{1}{4}$, that is 14$\frac{1}{2}$ Inches english.
12 : dettj of $\frac{3}{4}$ Lana y^{t} is 13$\frac{1}{2}$ Inches english measure.
12 : dettj of 36 Lana y^{t} is 12$\frac{1}{2}$ english.
12 : dettj of 28 Lana y^{t} is 11$\frac{1}{2}$ Inches.
30 : dettj of No 17 } Dimt
30 : dettj of No \ }
60 : No 1 17 plaine } plaine } Lett thease be Large size of ye Jews size.
60 : No \ plaine }
24 : Bundells of Large Long pearle necklace fine.
20 : bundells of fine midle pearle.
6 : bundells of fine seed pearle.

50 Bundells.
6 : dozen of Brushes and some fine small hower glasses.

S^{r} I hope all the drinking Glasses will come in 6 or 7 halfe chests. I praj send me A word in anser what silke sto kings are in fashion with you & wherther you will pease to trouble yourselfe with them to sell for mj ffrind I woud know w^{t} prise thej beare with you for if you Incouraigh him he will send some over to you.

The Number of everij sort of Drinking Glasses sent for ffebuarj 10 1670.
The list in numbers and quantities as in the drawings comes to.

"Sack glasses" "in all 100 dozen."
"Clarett Glasses" "in all 130 dozen."
"Beare Glasses" "in all doz. 170."
"Severall toijs."
flouer pott glasses 12 doz.

Long cruitts	20
Round bott Tumblers	06
brandj tumblers	06
rñish wine glasses	04
beakers	02
In all	50
Sack glasses	100 doz.
Claret	130
Beere	170
Toijs	50
The whole p^{ckt}	450 doz.

No. 5.

Senr Allesio Morrellj.

London, Januarij 18th 1671.

S^{r} My Respects presented unto you. I have this weeke Receivd yours, in anser to mijne of ye 30th November last wherein you promise me all things shall be well made & soe prized as you dout not but I shall rest well satisfied, which I hope will be Accordinglij performed, and I have heer in sent you a few patterns more for 74 dozen glasses 30 dozen for beer & 20 dozen for french wine and 24 dozen others which I desire maij be made of exelent good sound mettall and sent with mij former order, and also I would desire you to

send me 6 glasses more of ¾ ½ Lanna which I would have put in ye bottom of this or some of ye other Chests, but if you should have shipt them, before this comes to your hands pray Lett this small parcell be sent me the next opportunity following, & I pray Sr Remembr to have both these and the former order all packt in deeper halfe Chests than the Last weare that ye boxes of Lookeing glasses maij not bee soe soone felt bij our searchers hear, and also I praj Lett me know bij yor Letter in what N°/ Chests you put ye boxes of Lookeing glasses in, Soe desiring you to make all convenient speed & to ship them in ye first Good Ship for England y^t^ if possible I may have them heer in March or Aprill next at farthest I rest

yor ffrind & servant
John Greene.

beer glasses	30
Claret	20
Thick beer	06
Thick Claret	06
flintt Sack	02
Creuits wth feet	05
Creuits w^thout^ feet	05
	74 dozen

No. 6.

Seni^or^ Allesio Morelli.

London, May 3^d^: 1671.

S^r^ bij yours of ye 27th March I understand you have Resived mij patterns &c. & I have now sent you a few more patterns for 100 dozen of drinking Glasses and . . . Looking glasses more which I have added to mj fformer order, but S^r^ I am sorij to hear that you had then no English Ship in port, but I hope bj this time you maj have one, but S^r^ however bj the verj first oppertunity I desire you to ship one halfe part both of the drinking glasses and Looking glasses &c. both of mj fformer order of ye 10 ffeb last as also of this present order but S^r^ I woud by noe means have them come all to geather for it will bee much more convenient & safe for me to have one halfe of every sortt and fashion come this sumer and the other halfe next Spring, and I hope it will not be much more Trouble to you to order one hafe part of mij number of everij sortt and fashion to be provided first, so that if I can have one halfe part heer at London in Julj next and the other halfe in March or April next it will be best for mij Conveniencij. S^r^ I praij you once againe to take such care that I maij have good and be used verj Kindelj in the prices, else it will not be mij Interest to send to Venice for neither drinking Glasses nor Lookeing Glasses, for we make now verij Good Drinking Glasses in England and better Lookeing Glasses than anij that comes from Venice, for generallj your Lookeing Glasses are not well pollished Therefore S^r^ I pray looke well to them and observe all mij former directions for mij Interest S^r^ I have not more at present but to present mij respects to you. I rest

y^or^ Lov ffrind & serv^t^
John Greene.

My present order is as ffolls

Beer glasses 4 sortt	40: doz.
Clarett glasses of 5 sortt	50: doz.
Sack glasses of 3 sortt	10: doz.
Flourepotts of 2 sortt	10: doz.
	110 doz.

S^r^ I will assure you I have seen facterijs of Mr. Wijld's bying wherin good glasses of ¾

Lana were bought for 26 Livres a piece and glasses of ¾ ½ Lana for 36 or 37 Livres piece & soe Larger & cheaper than yours but Sr I praij Lett me have these glasses at once verrj good and as Cheap as anj other man has them Valle.

Sr I doe not much care if these be made of same fashions a dozen or 2 ribt glasses soe yt I woud not have a bove 6 or 8 . . . of ribt beer & 6 doz Ribt wine glasses.

No. 7.

London, Octob. 20th 1671.

Sr Yours of the 12th June last I Recd and paid your bill According to the time, and I have now also Recevied the 10 Chests of drinking Glasses with ye box of Looking Glasses & 2 boxes of false pearle & brushes out of ye Hope well, & Sr notwithstanding your punctuall Care & directions thej have not dealt well bj mee in six of those glasses ¾ sike measure for one box was yeir full measure but ye other box yeir was not one held ye full Measure yej wanted almost 2 Inches both in Length and breadth I assure you that box of glass was not worth aboue 18 Livres a peece but who ever it was that putt them upp I will tell him such dealeing is not fare and square, as for ye rest of the boxes of Lookeing glasses thej came Indifferent well Conditioned though I had a few of the small glasses broken, but I had above thirty dozen of mij Drinking Glasses broken (and Mr. Allen had more) all these things putt to geather I hope ye Lookeing Glass man will be so Civell as to send me 2 glasses of sir A brace gone. I shall cast mij selve Apone you to see that I have right done me as for those 3 dozen of Looking Glasses that were left behinde I woud not have you send them till I Give you further order neither woud I have you provide me these 110 dozen of drinking glasses which I sent to you the 5th of Maj which additional patterns came to late to you, because I will verrij shortlij send for a nother parcel of Drinking Glasses fo you I woud have ye Lookeing Glasses putt in with them I praij lett me heer from you next post that I may know whither you have Laid aside my last patterns for if shoud not have done so then I shall not weight for so manij bj a 100 dozen as other wajs I woud soe with mj Respects to you giveing you thanks for all yor Care and Trouble I rest yor ffrind J. G.

No. 8.

Seniour Allesio Morrellj.

London, Novembr 30, 1672.

Sr Mij Respects presented unto you not hearing from you in anser to mijne of the I have now sent you mij patterns for a small parsell of drinking glasses &c, which I praij you to order to bee made with all convenient speed, and shiped apone the first good sure ship for England that I may have them heer in March or Aprill next if possible: but as for those Aditionall patterns which I sent you last Maj which came to Late to be performed with the Last glasses you sent mee I would now have you Lett them a Lone and not send them: but onlj give order for these that I now send for and that theij be made as exact as maij be to ye pattern both for Quallitij and Quantity and of verij good cleer whit sound Mettall; for truelj the last you sent me the Mettall was indifferent good and cleer, but not so sound and strong as theij should have bin made; for therin Lies the exelencj of your Venice glasses that they are generallij stronger than ours made heer, and soe not so soon broken, Therfor Sr I praij take such care that these be made of verij good sound mettal and thicker and stronger than the last, that I maij gaine Creditt by them though not so much proffitt: heer is 120: doz beer glasses 90 dozen french wine & 20 dozen of Cruitts for oijle & Vinegar which makes upp 230

dozen which I would have packt in three deepe halfe Chests such as you sent Mr. Richard Sadler, and I desire you now to send me that Glass or Glasses which you got for me for the former default, and also the 12 glasses of $14\frac{1}{2}$ inches & ye 12 glasses $\frac{3}{4}$ $\frac{1}{2}$ silke measure that were wanting of mij former order; & also 6 glasses more of $\frac{3}{4}$ $\frac{1}{2}$ Lana pray let all these be packt up in ye bottoms of ye Chests of drinking glasses that I maij therebj save the Custome of them here, and to that end I must further desire you to send me two facterijs, and in one of your facterijs not to mention anij Looking Glasses nor the full number of the drinking glasses by 8 or 10 dozen in a chest for our officers heer are soe strikt that theij will see our facterijs, I would also have you to send me 6 dozen more heath brushes such as ye last you sent mee, and 30 mast of the best long ffalse peerle neck lacces 20 mast of the verij Largest sortt, but theij must be Larger than the largest you sent last, & 5 mast midle size & 5 mast of small seede pearle, the last took wett and manij of them were spoijled, I hope you may gett them for 7 Libres a Mast as well as for Mr. van Mildert though I have not so manij as hee, and Sir one thing more give me Leave to tell you that I see bij other marchants ffactorjs heer that Looking glasses are now bought cheaper than Latelj thej have bin, or then in mij last were therfor sense the Market is fallen I hope I shall have some benefitt by it but I shall Refer mijself to you hoping your Care and kind useaighe will be such as I may have no Cause to Complaine, and S^{r} when you have shiped theass goods you maij please to draw a bill apone me for ye valleu and it shall be puncktuallij paid, soe commiting yo^{u} to ye protection of the allmightj I rest

yor Reall ffriend & Servt
John Greene.

No. XXX.

Sloane MS. 857, Papers relating to the Glass-sellers, 1670-1691.

Petition.

In the beginning of the Last year 1669 Mr. Boalter, Mr. Todners, Mr. Burroughs & Mr. Hudgeabout petioned ye King & Counsell for a prohibition of Venice Looking Glasses pretending it would be for the public good of ye nation bij Increasing the Manufactur there off.

The petition was sent down to ye Consell of Trade and by them Committed to A Committee sitting at ye East India House London to call before them the workmen and Dealers in yt Commoditie and to examine the Good or evell of such a prohibition.

1. That Whereas thej pretend to make as good and Cheape as Venice Glass it was made Appear that the Venice glass are much Truer and better than the English (except some verj few of the Choisest plates thei can pick out) and that the Venice are now sould 25 per cent cheaper than the English when there is noe prohibition.

2. That thease persons are in no wise capable to suplj the Trade of the Nation, it Apeard soe when their was A Late prohibition neither can thej now, especiallj now soe manie are used for Coaches, but thej are persons alwajs Laboring to Jngrose this Commoditie into ye'r owne hands which thej will now efectualj doe if thej obtajne a prohibition their being but one Glas house in England that makes plates for Looking glasses and he has a pattent for it, with whom these persons have a peculiar Interest and know they shall have the disposall & choice of all that are made if they obtaine a Prohib^{on}.

3. That there are not a sufficient Number of Workmen in England to Grinde y^{e}

Glass to supplj one Third part of the Nation, and these for the most part verrj Botchers and will not improve there work soe long as their are soe few workmen and soe much worke for Coach glasses which thej put if not half wrought or polished as is need full for looking Glasses.

4. That theese persons when thej had formerly obtained a prohibition bought up all the Venice Looking Glasses thej could in Towne and then raised the price as thej pleasd to Retajlers and others which was a great prediuse to ye nation and soe thej do now again in hopes of A prohibition bj an Act of parlement, one of them having latelj bought a Thousand pounds worth of Venice glass of one Merch^{t} and expects a greater parsell when a ship arives that is ear long expected, and it is said to have brought 1400 pounds worth more in other parcels.

5. That heer to fore when thej had an opportunity thej bought up all the Venice rough plates in Toune and ye grinders being then constrajned to buj of them thej Ingojned them to bring in all the glass thej wrouht into their hands and then rased the price as thej pleased and privately let and bound to each other not to sell anj glass under those rates thej had agreed upone (this had bin proved to ye sd Committee had thej had ye Confidence to come face to face) bj a person that was bound with them and further he Testifies that that Morning before thej seald ye bonds one of those present offered him glasses for 45 ss apeece which he not then acepting in the afternoone after ye bonds were seald he would not Lett him have the same glasses under 10 ss a piece more but said now you must give mee another price for ym bj which it apears how greatlj ye nattion will be abused if thej obtaine this prohibition Thej being persons yt meett to consult such designs to ingrose and raise ye price of this Comoditj.

6. That whereas these persons pretend to increase ye Manufacture and soe far from what thej pretend, that thej have procured it to be expressed in their late new Charter that none shall sett up or exercise the Art of Grinding foijling &c. of Lookeing Glasses in London or with^{t} for 7 mijles thereof but such as have served seaven yeers Apprentice to y^{t} Acc^{tt} none of those persons themselves (except one Hudgeabout) ever served Apprentice to that Misterij, and thej have made bij Laws strictly Limitting all p'sons their number of Apprentices not withstanding their present great want of Workmen, and have lately vexed and troubled able workmen with Chargeable suits of Lawe Apone ye Statute of ye 5th of Elizabeth, because thej had not served apprentice to ye same, for which Trials ye Cause went for the defendents It appearing to be an Actt of late Beginning and not used in England when that statute was made, and soe not within the reach of it.

7. Another Reason was then given bj the Turkj Merch^{ts} was y^{t} it would be verj prejudiciall to them it being one of the principle comodities thej make their Returns in for our Manufacter and thej would Again oppose it but y^{t} it is Carjed one with all expedition and privacoy. Seaverall other Reasons were then Pr'sented to the Com̃ittee as ye Loss it will be to the King in his Customs, which are verij great upon that Com̃oditie, And will now be more if Drinking glasses be also prohibited.

The s^{d} Com̃ittee having taken notice of ye Reasons offered it, Mr. Child Cheerman to the com̃itte; Declared The were sensible These p'sons designed only their own private insterest; And therefore promised That if the did anijthing in favour of A Prohibition; that the Patten for making plates should be Calledoin; And Also ye Chatter of the Corporation; so anij P'sons should have Libertij to make plates and grind glasses, which promisses gave a great Check to their present expectation.

But yet they are now p'senting a Bill to the Parliam^{t} for a Prohibition both of Looking glasses wrought And drinking glasses, which P'tion is so'posed to be in the name of the

Companj of Glassesellers London These p'sons Lately Taken ye advantage of a Court of Assistants whereat was only thesse 4 p'sons Two of which are present wardens and the rest Potters who bij thosse small Glasses they deal in of those Pe'sons And soe being concerned with them; They procured their hands for A prohibition, whereas there are manij others of the Assistants whoe if theij had bin theire would have opposed it; Besides a hundred or two of workmen & dealers in that Comodittie; who saij they shall be undon if there should be A Prohibition Thesse p'sons already threatining That those that oppose them shall have noe glasses if the accomplish their p^{r}sent designe.

But if not with standing The Parliam^{t}: shall thinke fitt to parse an Act to this purposse, it is earnestly desired as a thing humbly conceived absolutely necessarij for the encouraging and encreasse the manufacture And for ye generall good of ye nation; that there maij be a clausse in the Act Granting full Libertij to any person to sett up glasse houses and to make Plates for Look: Glasses, And for anij p'sons to Grind, Pollish, foyle; and Casse Look: glasses, And to keep Apprentisses for the same notwithstanding any Charter, Bye Laws or Pattent to the Contrarij.

Concerning prohibiting Venice Drinken glasses every owne that in them knoows the Great difference there is betuene venice glasses and the best made in England yet if the Parliam^{t}: and ze gentrij of the nation can be satisfyed with English glasses, There none of ye shopp keepers will oppose it However it will be a Losse to the King in his Customes and a prejudice to the marchants in their returns from those parts—

Decemb^{r} 1670.

No. XXXI.

Sloane MS. 857, Papers relating to the Glass Sellers

May the 25th 1674.

(1) "Whereas Mr. Benet and Mr. Whit have made some proposalls to the Trade that thei should be the onlj Marchants to serve the Company with all sortts of Holland earthen ware and glasses, and also that the members of the Companij should deale onlj with them" referred for further consideration of a Committee or any five of them to use their best endeavours to get a draft of this Agreement so soone as may be and present the same to the Trade for their further and general consent.

(Actual signatures of thirty three members of the Glass sellers' Company.)

(2) Mr. Ravenscroft.

S^{r}. It is our request that yo^{u} will please to send downe to Samuel Moore now Clerke the Toppes of yor last Articles, and that yo^{u} doe Give him order to observe the same and alsoe yor former Articles with us; and that he may have the bespeaking of all Glasses made at Henly upon Thames; for that Mr. Moore better knowes what is fitter to be made for the Trade both as to ffashion and Size, then any other there, and therein yo^{u} will oblige, Sir

yor ffreinds

(Actual signatures of ten members of the Glass sellers' Company, John Greene among them).

London, 13 Octob^{r} 1674.

(3) The 18 September 1675.

Wee under written doe consent and are willing that Mr. George Raven scroft maj Transport beyond sea to Ireland or anij other parts the vallew of foure hundred pounds worth

of his flint Glasses made before the first of August Last, to be soe Transported before the first of March next Insueing and it shall not be taken for anj Breach of Artikels with our Trade of Glass selling what he hath or shall soe send to that vallew and tell the time above mentioned.

(Signature of George Ravenscroft and names of ten members.)

Memorand

Apone the Consideration of the above said Lisence or Consent to transportt to Ireland or anj other parts beyond sea itt is not to be under stood to send anj fflint Glasses to scott Land or anj other place in England or wales for future.

(Signature of George Ravenscroft.)

(4) List of members of the Company of Glass sellers, June 24, 1675.

Court of Assistants,

Richard Sadler,	Master,	20 members
	Livery,	11 „
	Yeomen,	
	of whom 20 are described as "Grinders"	57
		88

Another List of the names on July 11, 1677, John Hitchabout, Master.

(5) A Draft of "Proposal for ye Better Regulating the Greene Glass Trade." "Quort glass bottles plaine" are mentioned. The proposals are to put the green glass trade into the hands of three makers, the agreement being between three makers, three shop keepers, and three members of the Company, for a term of seven years and during that time the sellers shall not buy such glass from any other glass house set up during the said term.

(6) Under the year 1677 a list of the names of thirteen glass sellers is given from which three are chosen by the number of upright strokes of a pen after their names; thus Humphrey Kilby, Francis Garrard, and John Greene are "pitched upon" as "suitable for y^{r} interests and our owne." This fact is further set forth in a short letter addressed to the members of the Company by Edmund Levin, Edward Dallowe, & John Bowles.

(7) Draft of an agreement made with John Justice of the City of Edinburgh and John Greene to pay the former a certain sum,—not entered in the draft, for wares supplied to him.

(8) *Memorandum* Also at our Meeting this 3^{d} June 1685: wee the major part heer Considering that other Glass houses doe sell 18 to ye dozen of their Glasses Called fflint glasses to the great prediuse of us porttners in this Glass house we having yett sould but 15 to ye doz Itt is now Agreed and ordered that Mr. Hawlj Bishop doe deliver to all us partners concerned or anij other shop Keepers sixteen to the dozen of all sortts of glasses that are sould by dozen and all sorts sould by waight this to bee (document imperfect).

Mr. Hawlj Bishop.

According to our Articles made with you wee whose names are undersubscribed have this third day of June 1685 have Agreed and Chosen Mr. John Newarke to be our Clarke to officiate at the Glass House in the Savoy: and theirfore we doe desire you to Intertain him and wee doe expect your compliance heer in soe we rest y^{or} freinds.

(9) *Memorandum* December 1686, John Greene Citizen and Glass seller buys from Edward Dalton Sen. and Phillip Dalton Jun. glass makers a parcell or quantity of Green Glass bottles made or to be made at our Glass house near unto Rosemary Lane.

(10) A notice to Mr. Bishop, Mr. Racket, Mr. Digby, and Mr. Phines Bowles Aprill

28 1688. Gentlemen we rec[d] a letter from you of the 23 instant wherein you signified to the Company Glassellers that you are much dissatisfied at ye coming of Cuntry Glasses to London and that any of our Company should buy any of them, verely wee have reason to be more unsatisfied then you that any Glasses are made in ye Country and that any of them have been brought up to London which has occasioned to set up new men who wholy dealt in Cuntry Glasses as Mr. Craford & others & as to that small quantity any of our Company has bought signifies but little soe are wee very indifferent of buying any more for wee have noe desire to Incourage that trade But yet we cannot but take notice of that part of the Letter which threatens us that wee shall not have any of yo[rs] if wee buy any Cuntry Glasses but time will prove who are freinds or inimes to this Cuntry trade Wee conceive nothing would more conduce to cement the whole trade to you then all y[t] deniall to sell any Glasses to London Hawkers for you know very well how much you injured us thereby So wishing you would take that part into your serious consideration wee rest

(signatures torn off).

(In 1689 John Greene was Treasurer of the Feast of Sons of the Clergy.)

(11) Petition of the Glass Sellers' Company to the House of Lords showing that the wares they deal in take up much room and involve the having great houses and "sitt at great rents" nevertheless are in London itself greatly "mischieved" by the Hawkers who go about streets from house to house to sell and furnish those houses with glass and earthen ware, a bill being before their Lordships for suppressing Pedlers, pray to be included among the several trades enumerated in that bill. (No date.)

(12) A paper setting forth the case of the Glass sellers in London and all others selling glasses and earthenware in any City, Borough, Town Corporate, or Market Town in England and Wales in relation to the bill for the suppression of Hawkers and Pedlers. The Bill excepted Pedlers and Hawkers of glasses and earthenware. Showing that by the Statute of 39 Eliz. Cap. 4, Pedlers and Chapmen are adjudged rogues and vagabonds but glass men of good behaviour may travel in the country only having a license from three justices of the peace. But in the Statute of 1 James 1. Cap. 7 the said license for glass pedlers is repealed because under cover of this liberty rogues, vagabonds &c. followed their trade in this way, and it enacted that "all such persons as shall wander up and down to sell glasses shall be treated as rogues and vagabonds and dealt with accordingly." That there is no need of such persons to wander abroad and supply the countreys with glasses and earthenware these commodities being sold by shop keepers in all cities and towns &c. and almost all villages in England, and would be much more if these persons were suppressed who are grown so presumptuous as to cry their wares before the very doors and shops of those who are legally sellers of such goods to the great impoverishment and prejudice of all shop keepers in all places who pay rates and taxes &c., whereas these wandering hawkers bear no burden. Their goods are bad, they cheat the gentry and others with imperfect and deceitful wares, not fully burnt, which will crack and the white peal off (? tin glazed wares) when wet and used, and glasses not well annealed but waste and faulty which defects are not easily discerned but by persons of judgement, such ware as shop keepers with reputation cannot sell. They corrupt men servants and tempt them to steal their masters' provisions to truck with them for their wares. If the bill passes with the said provise all the shopkeepers in London or elsewhere in England selling glasses and earthenware will be in a far worse condition than now, for now we have good laws against them. These Glass hawkers and Pedlers have been looked upon as the most dangerous sort for formerly when commissions were granted for licensing hawkers and pedlers and these have been exempted and indeed they are a very incorrigible and stubborn sort of persons that regard no laws, "but should they obtain

Liberty from a Law to wander abroad they would be ten times more Insolent than they are even to haserd the Destruction of the Company of Glassellers." It is therefore most humbly prayed on behalf of all shop Keepers and glassellers in London, Westminster, Southwark and all other cities &c. that the proviso now inserted in the bill to allow any person or persons to wander abroad to sell any glasses or earthen ware "out of wich as London and Westminster and the Suburbs thereof be omitted or at least may be extended also to prohibitt all haukers pedlars petty chapmen and women from wandring abroad to sell any Glasses or Erthenware or going about to offer or expose to sel any in any other Cittys Borroughs Towns Corporate Market Towne In England or Wales with Crates Baskets or otherwise to sell offer or Barter any Glasses or Earthen wares upon paine of Suffering "the same penalties inflicted by that Act upon othe Haukers or Pedlars and petty chapmen to be recovered in like manner and for ye same Uses that other penalties upon other haukers pedlers and petty chapmen or women are to be recovered and Imployed."

Veneris 4 die Decembris 1691.

(13) "Att the Comm^ee^ to whom the Bill for suppressing of Hawkers & Pedlars is comitted.

"Att the Speakers Chambers att the House of Comons, Foot Onslow Esq. in ye Chair Ordered—That the Trades in Earthen and Glass wares doe attend the said Comm^ee^ on Teusday next at four of the Clock in ye Afternoon if they expect to be heard for what they have to offer in Relation to the said Bill. ffoot Onslow."

(original document).

(14) "Sir—I met with Mr. Palmer at the place appointed also your neighbout Mr. Palmer informs me that the Sollicitor Generall and the Chairman of the Comitte did not Insist uppon the old Bill but put in what Trades they thought fitt and left out ye rest ours being one of them and not thought fit to be inserted in order to which it is thought convenient that a motion be delivered by Sir Thomas Vernon to the Committee that "we may be heard by Counsell and also that Counsell be ordered to attend for that purpose tomorrow att four a Clock if this or somewhat to this end be not in action now you are never hereafter to be minded in this Bill I trust to your diligent Care in this matter because Ingaged myself and remain yours James Maydwell."

No. XXXII.

16 May 1674.

Manufacture of Glass.

Transcript of printed document.

Ravenscroft's Patent.

CHARLES THE SECOND, by the grace of God, &c., to all to whome these p̄sent^s^ shall come, greeting.

WHEREAS our trusty and welbeloved George Ravenscroft, Gentleman, hath humbley represented to vs, that with greate expence and industry hee hath atteyned to the "Art and Manufacture of a perticuler sort of Christaline Glasse resembling Rock Christall, not formerly exercised or vsed in this our Kingdome, and by his greate Disbursem^te^ haveing soe improved the Same as thereby to bee able to supply both Inland and Outland Markett^s^, whereby the Publique may be greatly advantaged," and hath therefore humbley prayed vs to grant him the sole vse and benefitt of his said

Invencon for the space of seaven yeares, being but one halfe of the tearme allowed by the Act in that case provided, wee being gratiously willing to provide & encourage all new and vsefull manufactures, and accordingly to gratify him the said George Ravenscroft in this his request,

KNOWE YEE, THEREFORE, that wee, of our especiall grace, certaine knowledge, and meere mocon, have given & granted, and by these psentt, for vs, our heires & successors, doe give & grant, vnto the said George Ravenscroft, his executors, admiors, & assignes, especiall licence, full & sole power, priviledge, & authority, that hee and they, by him and themselves, and by his and their deputies, servantt, & workemen, and noe others, shall and may, dureing the terme of seaven yeares next ensueing the date of these psentt, vse, practice, exercise, and enjoy the said new Invencon, within our said kingdome of England, dominion of Wales, and towne of Berwicke-vpon-Tweed, and in any other of our kingdomes & dominions, in such manner as to him or them shall seeme meete, and shall have and enioy the sole benefitt & advantage arriseing thereby or by reason thereof, to have, hold, and enioy the said licences, powers, priviledges, authorities, & other the pmisses hereby granted or intended to bee granted to the said George Ravenscroft, his executors, admiors, & assignes, from the day of the date of these psents for and dureing the terme of seaven yeares from thence next ensueing, and fully to bee compleate & ended. And to the end the said George Ravenscroft, his executors, admiors, & assignes, and every of them, may the better enioy the full & whole benefitt, and the sole vse and exercise of his said Invencon, aswell within the liberties as without, wee doe by these psentt, for vs, our heires and successors, require & streightly charge & comand all & every person & persons, bodies politique & corporate, of whatsoeu degree, name, or addicon they bee, that they nor any of them, dureing the terme of yeares hereby granted, either directly or indirectly, doe or shall vse or put in practice the said art or Invencon soe by the said George Ravenscroft invented or contrived as aforesaid, nor doe or shall counterfeite, imitate, or resemble the same, nor doe or shall make any addicon therevnto or substraccon from the same, whereby to ptend themselves the inventors or devisors thereof, without the licence, consent, or agreement of the said George Ravenscroft, his executors, admiors, or assignes, in writeing vnder his or their handt & seales first had & obteyned in that behalfe, vpon such paines & penalties as can or may be inflicted on such offenders for the contempt of this our comand in that behalfe, and further to be answereable to the said George Ravenscroft, his executors, admiors, or assignes, according to law & justice, for his & their damages thereby susteyned. And further, wee doe by these psentt, for vs, our heires & successors, give & grant vnto the said George Ravenscroft, his executors, admiors, & assignes, full power & authority that hee, they, & every of them, his, their, & every of their, deputies, servantt, or agentt, or any of them, haveing first obteyned a warrant in this behalfe from the Lord Cheife Justice of the Court of Kingt Bench for the tyme being, may, with the assistance of a constable or any other lawfull officer, aswell within the liberties as without, vpon request, at convenient times in the day dureing the tyme aforesaid, and in lawfull manner, enter and make search in any houses, shopps, or other places where there shall bee iust cause of suspition, for discovering and findeing out of all such persons as shall, within the terme of seaven yeares, imitate, or cause to bee imitated, or shall vse or put in practice the said art or Invencon, soe by the said George Ravenscroft invented & contrived as aforesaid, that soe such offenders may bee proceeded against & punished according to their demeritt. And further, wee doe, by these psentt, for vs, our heires & successors, will, authorise, & require all & singuler justices of the peace, maiors, sheriffs, bayliffs, head-boroughes, & all other officers & ministers of vs, our heires & successors for the time being, that they and every

of them respectively bee, from tyme to tyme dureing the said terme hereby granted, in their respective places, favoring, ayding, helping, & assisting vnto the said George Ravenscroft, his executors, admiors, & assignes, and to his & their deputie & deputies, servantt & agentt, and by all thingt in and about the accomplishment of our will & pleasure herein declared, and the exercise and execucon of the powers and priviledges herein & hereby granted, or menconed to be granted, as aforesaid. And moreover, wee will & comand by these psentt, for vs, our heires & successors, that our said officers, or any of them, doe not molest, trouble, or interrupt the said George Ravenscroft, his executors, admiors, or assignes, or his or their deputy, deputies, servantt, or agentt, or any of them, in or about the vse or exercise of the said art or Invencon, in any matter or thing concerning the same. Provided alwayes, that if att any tyme dureing the said terme of seaven yeares, itt shall bee made appeare to vs, our heires or successors, or any six or more of our or their Privy Councell, that this grant is contrary to law or piudiciall & inconvenient, or not of publique vse & benefitt, then vpon significacon & declaracon to bee made by vs, our heires or successors, vnder our or their signett or privy seale, or by the Lordt & others of our Privy Councell, or six or more of them, for the tyme being, in writeing vnder their handt, of such piudice and inconvenience, these our Lres Patentt, and all thingt therein conteyned shall forthwith cease, determine, & bee vtterly void, to all intentt & purposes, anything herein-before conteyned to the contrary notwithstanding. Provided alsoe, that these our Lres Patentt, or anything herein conteyned, shall not extend or bee construed to extend, to give priviledge vnto the said George Ravenscroft, his executors, admiors, or assignes, or any of them, to vse or imitate any invencon or worke found or invented by any other person or persons, and before the vse and practice of his, the said George Ravenscroftt Invencon publickly exercised in these our said realmes, or any the dominions or territories therevnto belonging, vnto whome wee have already granted our like Letters Patentt of Priviledge for the sole vse, exercise, and benefitt thereof; itt being our will & pleasure that the said George Ravenscroft, his executors, admiors, & assigns, & all & singuler other person & persons to whome wee have already granted our like Letters Patentt or priviledges as aforesaid, shall distinctly vse & practice their severall invencons by them invented & found out, according to the true intent & meaning of the said severall & respective Lres Patentt, and of these psentt. And lastly, wee doe by these psentt, for vs, our heires and successors, grant vnto the said George Ravenscroft, his executors, admiors, & assigns, that these our Letters Patentt, and the inrollment thereof, shall bee in and by all thingt good, valid, sufficient, and effectual in the law according to the true intent and meaneing of these psentt, and shall be taken, construed, & adiudged most favorably & beneficially for the best benefitt and advantage of the said George Ravenscroft, his executors, admiors, and assignes, aswell in all our Courtt of Record as elsewhere, notwithstanding the not full & certaine describeing the manner & quality of the said art or Invencon, or of the certaine vse & benefitt thereof, and notwithstanding any other defectt, incertainties, or imperfeccon in these psentt conteyned, or any act, statute, ordinance, provision, proclamacon, or restraint to the contrary in anywise notwithstanding.

In wittnesse, &c. Wittnes the King att Westm, the Sixteenth day of May.

By Writt of Privy Seale.[1]

[1] Flint and Pebble Glass.

Plot's *Natural History of Oxfordshire*, 1676, p. 253.

§ 92. To which may be added the Invention of making glasses of stones & some other materials, at Henly on Thames, lately brought into England by Seignior de Costa a Montferratees, & carried on by one Mr. Ravenscroft who has a patent for the sole making of them; and lately by one Mr. Bishop. The materials they used formerly were the blackest Flints calcined, and

No. XXXIII.

Houghton Letters for the Improvement of Commerce and Trade, first published 1683.

List of Glass Houses in England and Wales.

May 15, 1696. No. cxcviij.

An Account of all the Glass Houses in England & Wales.	The several Counties they are in.	The Number of Houses.	And the Sorts of Glass each House Makes.
In and about London & Southwark		9	For bottles.
		2	Looking glass plates.
		4	Crown glass and plates.
		9	Flint glass and ordinary.
Woolwich	Kent	1	Crown glass and plates.
		1	Flint glass and ordinary.
Isle of Wight	Hampshire	1	Flint glass and ordinary.
Topsham nr Exon	Devonshire	1	Bottles.
Odd Down nr Bath	Somersetshire	1	Bottles.
Chellwood		1	Window glass.
In and about Bristol	...	5	Bottles.
		1	Bottles and window glass.
		3	Flint glass and ordinary.
Gloucester	Gloucestershire	3	Bottles.
Newnham		2	Bottle Houses.
Swansea in Wales	Glamorgan	1	Bottles.
Oaken Gate	Shropshire	1	Bottles and window glass.
Worcester	Worcestershire	1	Flint, green, and ordinary.
Coventry	Warwickshire	1	Flint, green, and ordinary.
Stourbridge	Worcestershire	7	Window glass.
		5	Bottles.
		5	Flint, green, and ordinary.
Near Liverpool	Lancashire	1	Flint, green, and ordinary.
Warrington		1	Window glass.
Nottingham	Nottingham	1	Bottles.
Awsworth		1	Flint, green, and ordinary.
Custom More		1	Bottles.
Nr Awsworth		1	Flint, green, and ordinary.
Nr Silkstone	Yorkshire	1	Bottles.
Nr Ferrybridge		1	Bottles.
		1	Flint, green, and ordinary.
King's Lynn		1	Bottles.
Yarmouth		1	Flint, green, and ordinary.
		1	Bottles.
Newcastle-upon-Tyne	Northumberland	6	Window glass.
		4	Bottles.
		1	Flint, green, and ordinary.
		88	

Our glass men for making the best flint glass use instead of powdered flints a very a white Cristalline sand, adding to each pound of these, as it was formed by solution of their whole mixture, by the Ingenious Dr. Ludwell formerly Fellow of Wadham College, about two ounces of Niter Tartar & Borax.

§ 93. But the glasses made of these being subject to that unpardonable fault called Crizelling, caused by the two great quantities of the salts in the mixture, which either by the adventitious Niter of the Air from without, or warm liquors put in them, would be either increased or dissolved; and thereby induce a Scabrities or dull roughness irrecoverably clouding the transparancy of the glass; they have chosen rather since to make their glasses of a great sort of white Pebbles, which as I am informed they have from the river Po in Italy; to which adding the aforementioned salts, but abating in the proportions they now make a sort of Pebble glass which are hard, durable, and whiter than any from Venice, and will not Crizel, but under the severest tryals whatever, to be known from the former by a Seal set purposely on them.

*** Plot goes on to say that the improvement lies not in the alteration of the Calx, for flint and pebbles are both Pyrites, but in the abatement of the salts, for there are some of the flint glasses, *strictly so called*, which have stood all tests; and that if *white pebbles* are really fitter for the purpose than black flints they need not fetch them from Italy for there are plenty and to spare in England.

white sand such as we strow upon writing which is commonly brought from Maidstone in Kent & Isle of Wight, the common sand from Woolwich &c. with this sand and well purified potash the best christal glass is made.

Kelp a very good sort comes from Cartagena & a better from Alicante but the best from Tripoli in Syria & Alexandria in Egypt. According to my information we are of late greatly improved in the art of glass making for I remember the time when the Duke of Buckingham first encouraged glass plates and Mr. Ravenscroft first made the flint glasses. Since then we have mended our window glass & outdo all abroad & whate'er may be said against stock jobbing yet it has been the means to raise great sums of money to improve this art.[1]

No. XXXIV.

15 Feb. 1734.

Glass Furnace, &c.

Transcript of printed document.

Perrott's Patent.

GEORGE THE SECOND, by the grace of God, &c., to all to whom these presents shall come, greeting.

WHEREAS Humphry Perrott, of our city of Bristol, Glass Maker, hath by his petition humbly represented unto us, that he hath been bred up and followed the trade and mystery of a Glass Maker, and for some years has been endeavouring to make finer metal than heretofore, as well as to render it cheaper to our subjects, which at length he has accomplished by inventing "A Furnace to contain Double Bottom Potts, or any others, for the better Melting, Preparing, and Preserving all Sorts of Glass Wares, which Furnace is contrived in a new Manner with Artificial Draughts to it, whereby to force the Heat of Fire the sooner to perform its Office, as well as a Furnace with Artificial Draughts for the better Warming and Flashing of Crown Glass by Feeding it with Fewell at Teasing Holes, which will much reduce the Expence of Coal; and hath also found out a New Method for the more effectual Preserving all Sorts of Window Glass, when Nealing in the Kiln, by leaving off Drossers, and using in their stead Mathematical Racks, made of Iron, Clay, or Stone, or anything else that will endure the Fire, all which will be of general Use and Benefit to the Publick;" that the petitioner hath been at much pains and great charges in bringing this his invention to perfection, he hath therefore most humbly prayed us to grant him our royal Letters Patents for the sole benefit and advantage of his said new Invention for the term of fourteen years, according to the statute in such case made and provided, wee, being willing to give encouragement to all arts and inventions which may be for the publick use and benefit, are graciously pleased to gratify him in his request.

KNOW YE THEREFORE, that wee, of our especial grace, certain knowledge, and meer

[1] Among the glass imported in 1694 were 90 gross of glasses apparently for mumm, and Houghton suggests that the native manufacture of flint mumm glasses might be encouraged. The Looking glasses imported were the little ones which the English hardly thought worth making (Houghton, cxcvj.-cxcviij.)

In 1833 there were 126 glass houses in the United Kingdom, namely, 106 in England, 10 in Scotland, and 10 in Ireland.

In the Diary of Celia Fiennes, 1697, the following occurs:—

"Castleton Bridge (Derbyshire) where there was a glass house: we saw them blowing White Glass and neale it in a large oven by the heate of ye ffurnace."—*Through England on a Side Saddle*, p. 75, Edit. 1888. This house is not mentioned by Houghton; it may have been newly set up.

motion, have given and granted, and by these presents, for us, our heirs and successors, do give and grant unto the said Humphry Perrott, his executors, administrators, and assigns, our especial lycence, full power, sole priviledge and authority, that he, the said Humphry Perrott, his executors, administrators, and assigns, and every of them, by himself and themselves, or by his and their deputy or deputyes, servants or agents, or such others as he, the said Humphry Perrott, his executors, administrators, or assigns, shall at any time agree with, and no others, from time to time and at all times hereafter during the term of years herein expressed, shall and lawfully may make, use, exercise, and vend his said new Invention, as above described, within that part of our kingdom of Great Britain called England, our dominion of Wales, and town of Berwick-upon-Tweed, in such manner as to him, the said Humphrey Perrott, his executors, administrators, and assigns, or any of them, shall in their discretions seem meet, and that he, the said Humphry Perrott, his executors, administrators, and assignes, shall and lawfully may have and enjoy the whole profit, benefit, cōmodity, and advantage from time to time coming, growing, accrueing, and arising by reason of the said Invention for and during the term of years herein mentioned, to have, hold, exercise, and enjoy the said lycence, powers, priviledges, and advantages herein-before granted or mentioned to be granted unto the said Humphry Perrott, his executors, administrators, and assigns, for and during and unto the full end and term of fourteen years from the date of these presents next and imediately ensuing, and fully to be compleat and ended, according to the statute in such case made and provided. And to the end that the said Humphry Perrott, his executors, administrators, and assigns, and every of them, may have and enjoy the full benefit and the sole use and exercise of the said Invention, according to our gratious intention herein-before declared, wee do by these presents, for us, our heirs and successors, require and strictly cōmand all and every person and persons, bodyes politick and corporate, and all other our subjects whatsoever, of what estate, quality, degree, name, or condition soever they be, within that said part of our kingdom of Great Britain called England, our dominion of Wales, and town of Berwick-upon-Tweed aforesaid, that neither they or any of them, at any time during the continuance of the said term of fourteen years hereby granted, either directly or indirectly, do make, use, or put in practice the said Invention, or any part of the same so attained unto by the said Humphry Perrott as aforesaid, nor in anywise counterfeit, imitate, or resemble the same, nor shall make or cause to be made any addition thereunto or substraction from the same, whereby to pretend himself or themselves the inventor or inventors, devisor or devisors thereof, without the lycence, consent, or agreement of the said Humphry Perrott, his executors, administrators, or assigns, in writing under his or their hands and seals, first had and obteined in that behalf, upon such pains and penaltyes as can or may be justly inflicted on such offenders for their contempt of this our royal cōmand, and further to be answerable to the said Humphry Perrott, his executors, administrators, and assigns, according to law, for his and their damages thereby occasioned. And moreover wee do by these presents, for us, our heirs and successors, will and cōmand all and singular the justices of the peace, mayors, sheriffs, bayliffs, constables, headboroughs, and all other officers and ministers whatsoever of us, our heirs and successors for the time being, that they or any of them do not nor shall, at any time hereafter during the said term hereby granted, in anywise molest, trouble, or hinder the said Humphry Perrott, his executors, administrators, or assigns, or any of them, or his or their deputyes, servants, or agents, in or about the due and lawful use or exercise of the aforesaid Invention, or anything relating thereto. Provided always, and these our Letters Patents are and shall be upon this condition, that if at any time during the said term hereby granted it shall be made appear to us, our heirs or successors, or any six or more of our or their Privy Council, that this our grant is contrary to law, or preiudicial or

inconvenient to our subjects in general, or that the said Invention is not a new invention as to the publick use and exercise thereof in that said part of our kingdom of Great Britain called England, our dominion of Wales, and town of Berwick-upon-Tweed aforesaid, or not invented and found out by the said Humphry Perrott as aforesaid, then, upon signification or declaration thereof, to be made by us, our heirs or successors, under our or their signet or privy seal, or by the lords and others of our or their Privy Council, or any six or more of them, under their hands, these our Letters Patents shall forthwith cease, determine, and be utterly void to all intents and purposes, anything herein-before contained to the contrary thereof in anywise notwithstanding. Provided also, that these our Letters Patents, or anything herein contained, shall not extend or be construed to extend to give priviledge unto the said Humphry Perrott, his executors, administrators, or assigns, or any of them, to use or imitate any invention or work whatsoever which hath heretofore been found out or invented by any other of our subjects whatsoever, and publickly used or exercised in that said part of our kingdom of Great Britain called England, our dominion of Wales, or town of Berwick-upon-Tweed aforesaid, unto whom like Letters Patents or priviledges have been already granted for the sole use, exercise, and benefit thereof, it being our will and pleasure that the said Humphry Perrott, his executors, administrators, and assigns, and all and every other person and persons to whom like Letters Patents or priviledges have been already granted as aforesaid, shall distinctly use and practice their several inventions by them invented and found out, according to the true intent and meaning of the same respective Letters Patents and of these presents. Provided likewise, nevertheless, and these our Letters Patents are upon this express condition, that if the said Humphry Perrott, his executors or administrators, or any person or persons which shall or may, at any time or times hereafter during the continuance of this grant, have or claim any right, title, or interest in law or equity of, in, or to the power, priviledge, or authority of the sole use and benefit of the said Invention hereby granted, shall make any transferr or assignment, or any pretended transfer or assignment, of the said liberty and priviledge, or any share or shares of the benefit or profit thereof, or shall declare any trust thereof to or for any number of persons exceeding the number of five, or shall open or cause to be opened any book or books for public subscriptions to be made by any number of persons exceeding the number of five, in order to the raising any sūme or sūmes of money under pretence of carrying on the said liberty or priviledge hereby granted, or shall by him or themselves, or his or their agents or servants, receive any sūme or sūmes of money whatsoever of any number of persons exceeding in the whole the number of five, for such or the like intents or purposes, or shall presume to act as a corporate body, or shall divide the benefit of these our Letters Patents, or the liberty and priviledges hereby by us granted, into any number of shares exceeding the number of five, or shall committ or do or procure to be committed or done any act, matter, or thing whatsoever during such time as such person or persons shall have any right or title, either in law or equity, in or to the said premisses, which would be contrary to the true intent and meaning of a certain Act of Parliament made in the sixth year of the reign of our late royal father King George the First, intitled (An Act for the better securing certain powers and priviledges intended to be granted by His Majesty by two charters for assurance of ships and merchandizes at sea, and for lending money upon bottomry, and for restraining several extravagant and unwarrantable practices therein mentioned), if these our Letters Patents had not been granted, or in case the said power, priviledge, or authority shall at any time hereafter become vested in or in trust for more than the number of five persons, or their representatives, at any one time (reckoning executors or administrators as and for the single person whom they represent as to such interest as they are or shall be intitled to in right of such their testator or intestate), that then and in any of the said cases

these our Letters Patents, and all libertyes, and advantages whatsoever hereby granted, shall utterly cease, determine, and become void, anything herein-before contained to the contrary thereof in anywise notwithstanding. And, lastly, wee do, by these presents, for us, our heirs and successors, grant unto the said Humphry Perrott, his executors, administrators, and assigns, that these our Letters Patents, or the inrollment or exemplification thereof, shall be in and by all things good, firm, valid, sufficient, and effectual in the law, according to the true intent and meaning thereof, and shall be taken, construed, and adjudged in the most favourable and beneficial sence for the best advantage of the said Humphry Perrott, his executors, administrators, and assigns, as well in all our courts of record as elsewhere, and by all and singular the officers and ministers whatsoever of us, our heirs and successors, within that part of our said kingdom of Great Britain called England, our dominion of Wales, and town of Berwick-upon-Tweed aforesaid, and amongst all and every the subjects of us, our heirs and successors, whatsoever and wheresoever, notwithstanding the not full and certain describing the nature or quality of the said Invention, or of the materialls thereto conducing and belonging.

In witness, &c. Witness ourself at Westminster, the Fifteenth day of February.
By Writt of Privy Seal.

No. XXXV.

5 Dec. 1755.

Transparent Red Glass.

Transcript of printed document.

Oppenheim's Specification.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I Mayer Oppenheim the eldest, of the City of London, Merchant, send greeting.

WHEREAS I, the said Mayer Oppenheim, did, by my Petition, humbly represent unto His most Excellent Majesty King George the Second, that I had, with great labour, industry, application, and at a considerable expence, invented and brought to perfection "A Method, entirely New and not hitherto Practiced, of Making or Manufacturing of Red Transparent Glass, which would be of general Utility," I therefore, by my said Petition, most humbly prayed His Majesty to grant unto me, the said Mayer Oppenheim, my executors, administrators, and assigns, especial lycence for the sole making and vending my said Invention for the term of fourteen years, according to the Statute in that case made and provided; His said Majesty, being willing to give encouragement to all arts and inventions which may be for the publick good, did graciously vouchsafe to condiscend to my request, and did therefore, by His Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Twenty-eighth day of November, in the twenty-ninth year of His reign, give and grant unto me, the said Mayer Oppenheim, His especial licence that I, the said Mayer Oppenheim, my executors, administrators, and assigns, should and lawfully might make, use, exercise, and vend my said Invention within that part of Great Britain called England, His Dominion of Wales, and Town of Berwick-upon-Tweed, for and during and unto the full end and term of fourteen years from the date of the said Letters Patent, in such manner as to me, the said Mayer Oppenheim, my executors, admiors, and assigns, should seem meet; in which said Letters Patent is contained a provisoe that if I,

the said Mayer Oppenheim, did not within four kalendar months next after the date of the said Letters Patent cause a particular description of the nature of my said Invention, and in what manner the same was to be performed, by an instrument in writing under my hand and seal, to be inrolled in His said Majesty's High Court of Chancery, that then the said Letters Patent, and all liberties & priviledges thereby granted, should cease, determine, and become void, as in and by the said in part recited Letters Patent (referrence being thereunto had) may more fully and at large appear.

NOW KNOW YE, that I, the said Mayer Oppenheim, in pursuance of the said proviso, do hereby describe the nature of my said Invention, and the manner in which the same is to be performed, as follows (to wit):—

Take of the materials that compound the flint glass; let them be well purified, and to them add an equal quantity of braun stein; mix them together, and place them in a reverberatory furnace for thirty-six hours. By that time the calcination will be compleated. This calcination must be cohobated with warm water until no saline particles remain, when it may be dry'd, and an equal quantity of sal ammoniac put to it; then levigate well together by the help of distill'd vinegar; again let it be dried, and put in a retort well secured; place it in a sand furnace, and give it eighteen hours' fire, strong enough for sublimation. After this, seperate the calx from the sublimed matter. To this sublimat let an equal quantity of sal ammoniac be added; then levigate in the manner before directed, return this mixture into a retort, and give it a sufficient fire to convert your braun stein to a liquid. Of this liquid take half an ounce, and to it add thirty grains of dissolved Dutch gold; put this quantity to every pound of the flint materials; place it in a reverberatory furnace, and you will have white flint glass, which, on being exposed to a second heat, will be the red transparent. N.B. The compounds of the flint contain two parts of lead, one part sand, and one part of saltpetre or borax.

In witness whereof, I, the said Mayer Oppenheim, have hereunto set my hand and seal, this Fifth day of December, in the said twenty-ninth year of the reign of His said Majesty King George the Second, and in the year of our Lord One thousand seven hundred and fifty-five.

MAYER OPPENHEIM, Eldest. (L.S.)

Sealed and delivered (being first duly stampt) in the presence of

John Moore.

AND BE IT REMEMBRED, that on the said Fifth day of December, in the year above written, the aforesaid Mayer Oppenheim came before our said Lord the King in His Chancery, and acknowledged the Writing aforesaid, and every matter and thing therein contained and specified, in form above said. And the said Writing was stampt according to the Statute made in the sixth year of the reign of the late King William and Queen Mary, and so forth.

Inrolled the Twelfth day of March, in the twenty-ninth year of the reign of His Majesty King George the Second, 1756.

INVENTORIES, &c.

No. I.—1459.

Extract from the Inventory of the Effects of Sir John Fastolfe. Taken in 1459.[1]

In Camera et Warda nuper pertineñ đne Mylcentie Fastolf.

Item, ij lyttyll Ewers of blew glasses powdered withe golde.

No. II.—1536-1544.

Extracts from the Privy Purse Expenses of the Princess Mary.[2]

Mens' Januarij, 1536-7.

Itm̃ geueñ to a fũnte of my Lord p'vey Seylys bringing to my ladt' g̃ce swete waters[3] and Fvmes, *i.e.* perfumes . . . . . vijs̃. vjd.

Mens' Marcij.

Itm̃ geueñ to a pore prest of Hatfeld bringing to my ladt' g̃ce a glasse of . ijs̃. vjd.

Mens' Junij.

Itm̃ geueñ to maistres wheler fũnte bringing a Case for a glasse . . xxd.

Mens' Aprilis 1538.

Item̃ geueñ to the Prince his poticary bringing a glas of Rose water . . vs̃.

Mens' Maij.

Itm̃ geueñ to one of my lady of Suff'. funte bringing aqua compos̃ and othr̃ thingt' . . . . . vjs̃. vjd.

Mens' Januarij, 1542-3.

Itm̃ geueñ to iij Venetians geuing my ladt' g̃ce a fayr stele glasse[4] . . xvs̃.

Itm̃ geueñ to my lady maistres funte bringing a glasse to my ladt' grace . vijs̃. vjd.

Mens' Julij.

Itm̃ p^d to my lady Hastingt' fũnt for a glasse of Roose water . . . ijs̃.

Mens' August'.

Item̃ to my lord of Huntingtons fũnt for bringing a glasse of Rose wat' . iijs̃. iiijd.

Itm̃ to my lord of Huntingtons fũnt for bringing a glasse of Cyrypp of Roses to hir grace . . . . . vs̃.

Itm̃ to my lady of Northefolk fũnt for bringing a glasse of Roose wat' . iijs̃. ixd.

[1] *Archaeologia*, vol. xxi. p. 269.

[2] *Privy Purse Expenses of the Princess Mary*, by Frederick Madden. Edit. 1831.

[3] Probably for use in the guédoufles, or casting glasses.

[4] This was six years before the arrival of Edward VI.'s eight Venetians.

Itm̃ to my lord of Huntingtons m̃nt for bringing a glasse of Roose wat[r] . ijs.
Mens' Septemb'.
Itm̃ payed to a glasier at Wodstok . . . . . viijd.
Mens' Januarij 1543-4.
Itm̃ (from) my lady Buttler a Casting glasse and a Smoke . . . vijs. vjd.
Item̃ from my lady Bryan̅ a Casting glas . . . . . vs.
Mens' M'cij.
Itm̃ gevin to therle of Huntingtons m̃nt for bringing a glasse of Rose water.
Mens' Aprilis.
Itm̃ gevin to a poore woman for bringing a glasse of Roose wat[r] . . iijs. iiijd.

No. III.—1542.

Extracts from Inventories of effects of Henry VIII. preserved among the Records of the Court of Augmentations, in the Public Record Office; 1542.[1]

Glasses and soudry other thinges of erthe.

Item thre Bottelles or Flagons of blewe glasse partely gilte.
Item two Bottelles or Flagons of glasse jasper colour.
Item twelve other Flaggons or Bottelles of glasse.
Item oone Bason and oone Leyer of blewe glasse partely gilt the Leyer having the Kinges armes gilt upon it.[2]
Item oone Bason and two Layers of glasse all of diaper worke.
Item twelve other Basons and xiij. Ewers and Layers of glasse.
Item thre Bolles of glasse jasper colour withowte covers two of them having feete.
Item twelve Bolles of glasse with oone cover to them all wrought with diaper worke white.
Item therty and foure other Bolles of glasse with owte covers.
Item two great Glasses like Bolles standing upon fete blewe and white partely gilt.
Item foure standing Cuppes of blewe glasse with covers to them paintid and gilt.
Item thertye other standing Cuppes of glasse of sondry sortes many of them lacking covers.
Item foureteene other standing Cuppes of glasse diaper worke of sondry fashions some of them lacking covers.
Item oone standing Cuppe of glasse paintid white galley fashion withowte a cover.
Item two standing Cuppes with covers of glasse jasper colour.
Item two litle standing Cuppes with covers chalice fashion of glasse of many colours.
Item sixteene Goblettes of glasse withowte covers.
Item seven Glasses like pottes with oone handle oone of them being blewe.
Item oone Glasse like a pott paintid and garnisshid aboute the bryme with silver and gilt with a cover withoute garnisshing.
Item thre Glasses like pottes with two eares with covers to them.
Item thre great Glasses like pottes with oone eare jasper colour without covers.
Item oone Glasse like a pott with owte a cover of many colours with oone ear.
Item oone Glasse like a pott with two ears with a cover of many colours.
Item oone Glasse like a pott tankerd fashion with whopes with a handle and a cover to the same.

[1] *Archæological Journal*, vol. xviii. p. 134.
[2] A layer appears to have been a particular vessel with a cover; some were perhaps for washing, *lavor*.

Item oone Cuppe of Glasse with two eares the fote garnisshid with silver and gilt with a cover likewise garnisshid having a knoppe of silver and gilt with Quene Annes[1] sipher engraven in it.

Item oone Cuppe of blewe glasse the fote bryme and cover garnisshid with silver and gilte with a knop of like silver and gilt.

Item oone Cuppe of glasse with a cover the fote being of silver and gilt and viced on.[2]

Item a Cuppe of glasse the fote being garnisshid with silver and gilt.

Item twentye and foure Cuppes of glasse of sondry sortes some being partely gilt and some not gilt most of them lacking covers.

Item oone litle glasse Cuppe with a cover of blewe glasse.

Item oone Glasse Jugge fashion with iiij eares with a cover.

Item twelve Crusis of glasse painted white galley[3] fashion with xj covers to them.

Item fyvetene Cruses of glasse with covers xiiij. of them being grene and oone blewe.

Item oone Cruse withowte a cover of glasse with many colours.

Item two Cruses of glasse with covers of Jasper colour.

Item oone Layer of glasse the fote handle and cover of silver and gilt and the bryme therof likewise garnisshid with silver and gilt.

Item oone Layer with a spoute of glasse the cover and joint of the same being silver and gilt with H and A[4] engraven upon the cover.

Item eight Leyers of colourid glasse of sondry sortes.

Item oone Glasse garnisshid in the top with silver like a frame with belles of silver hanging in it.

Item oone thike Glasse of christall with a case of lether lyned with crymsen vellat.

Item four Glasses with long smale neckes and great bellies.

Item oone litle like Glasse rowid[5] with white.

Item nine Spice plates of grene and blewe glasse great and small iij. of them being partely gilt.

Item seven Spice plates of glasse jasper colour.

Item oone lowe Candlesticke of glasse jasper colour.

Item thre great bell Candlestickes of glasse.

Item foure lesse bell Candlestickes of glasse partely gilt.

Item thre Aulter Candlestickes of glasse.

Item sixte Trenchers of glasse.

Item foure Spownes the steeles[6] being glasse the spones being of metall gilt &c.

Item two Forkes of metall gilt the steelis being glasse &c.

Item lxvj. Platers Disshes and Sawcers of glasse.

Item oone Casting Bottell[7] of blewe glasse.

Item oone Baskett of glasse with two eares of diaper work.

Item two Pottes with covers for conservis of blewe glasse partely gilt.

Item oone Hollywater Stocke of glasse with a bayle.[8]

[1] Anne Boleyne.

[2] Screwed on, from *visser*, to screw. The stone newel stair of a mediæval tower was called a *vice*.

[3] Sir F. Madden reads this "gallic" (*Privy Purse Expenses of the Princess Mary*, Index and Notes, p. 225).

[4] For Henry and Anne.

[5] Striped.

[6] A handle; stail is in common use in Northamptonshire for the handles of agricultural and other implements.

[7] For casting or sprinkling perfume—a guédoufle.

[8] A holy water stoup with (?) a sprinkler.

No. IV.—1556.

Extracts from the Private Account Book of William More of Loseley, Surrey, Augt 20, 1556.[1]

In my wyfs closet.

Itm̃. xxv. glassys for waters	vs.
Itm̃. j great bottell glasse	vjd.
Itm̃. a glasse bottell w^{t} wycker	ijd.
Itm̃. a glasse with a cou̅ to drynke bere in	viijd.
Itm̃. a lyttle pot whyte emayled	iiijd.
Itm̃. a glasse ewere gilt	viijd.
Itm̃. a lyttle blewe bereglasse	ijd.
Itm̃. a lyttle bereglasse of whyte and grene	vjd.
Itm̃. an other lyttle potte whyte eneyled	ijd.
Itm̃. ij glasses for conserves	iiijd.
Itm̃. ij other lyttle glasses	jd.
Itm̃. a bere glasse	ijd.
Itm̃. iij lyttle barrels for sukket[2]	ijd.
Itm̃. a lyttle glasse for water	jd.
Itm̃. iij glasses lyk chalisys	xijd.
Itm̃. ij bole glasses	xijd.
Itm̃. a glasse bottell colored	ijs.
Itm̃. a glasse ewere	viijd.
Itm̃. a great glasse ewere to keepe oyle in	xxd.
Itm̃. a lyttle glasse for aqua composita	jd.
Itm̃. ij bere glasses	iiijd.
Itm̃. a bere glase w^{t} a cou̅	xijd.
Itm̃. a ewere of glasse brode	vjd.
Itm̃. a bottell glasse	vjd.
Itm̃. a bere glasse w^{t} ij handles	iiijd.
Itm̃. ij glasses for waters	iiijd.

No. V.—1588.

Extracts from an Inventory of the Plate, Household Stuff, Pictures, &c., in Kenilworth Castle, taken after the death of Robert Earl of Leicester, 1588.[3]

Glasses.

Ffyve plaine bole glasses, without covers.

Ffyve indented bole glasses; two graven bole glasses; twelve beare glasses of several fashions, iij with covers; two plaine taper glasses with covers; two others ribbed taper glasses; an embossed glasse with a cover; two glasse ewers.

[1] *Archæologia*, vol. xxxvi. p. 292. [2] Sweetmeat. [3] Halliwell's *Ancient Inventories*.

Glass Dishes.

Tenne glasse dishes gilte with the sinque foyle on the brims.
Eight graven dishes of glasse about the brims.
Twelve great standing indented bole glasses for creame.
A deepe standing glasse with a cover.
Ffyveteen glasses, brode brimed and narrowe bottoms.
Ffowertene greate deepe glasses, viij of them plaine.
A dozen of dishe glasses of one sorte.
Two dozen and iiij dishe glasses of another sorte.

No. VI.—1612-1633.

Extracts from the Household Books, and other Papers, of the Lord William Howard of Naworth Castle,—"Belted Will."[1]

1612.—*Rewards.*—Aug. 1. R. Milburn's boy bringing a glasse of rose water from Carlyle. . . . vjd.

Utensiles or Necessaries.—3 glasses, vjs.; for glasses xijd.; 2 glasses for Carlyle house, vjd.; 2 glasses vjd.

Riding Charges and Errands.—Turner's charges at Newcastle bringing glasse, vijs.

My Ladye's Parcells, &c. Glasse Plates, 6, xijd.

1618.—*Utensiles or Necessaries.*—A glasse celler[2] bought then (June 22) xvjs. iiijd. 2 glasses for my Lady vd.; 13 glass plates ijs.; a drinking glasse for my Lady iijd.; glasses bought then by Mrs. Mary, xiiijd.; glasses bought at the gate, xviijd.

1620.—*Utensiles and Necessaries.*—A great drinking glasse, iijd.; a little glasse, ijs.

Riding Charges and Errands.—Thomas Denny bringing glasses from Am. Scot., xijd.

1621.—*Utensiles or Necessaries.*—28 glasses, xxjs.; 2 bottles, to put wine in, viijd.; stilling glasses and plates ijs. vd.

"John Pildrem's Account-book" for the year 1621.—*Nessesareis.*—For 28 glasseis for beare and wyne, xxjs.

1622.—*Rewards and given to the Poor.*—For bringing a glasse of water from Mr. Maior vjd.[3]

1623.—*Nessessareis.*—For a seller with glasseis xd., and other glasseis, xijs.

1624.—*Wine.*—xix quartes of seck to fill the cellers of glasses, xixs.

Nessesareis and dewteis.—For 2 sellers, with glasseis of 8 pottils a peace xxvjs.

1625.—*Utensiles or Necessaries.*—For xx drincking glasses, iiijs.

1628.—"John Pildrem's Account-book" for the year.

1628.—2 dossen of trenchers and thre glasses, ijs. viijd.

1629.—*Utensills or Necessaries.*—For Venice glasses and French glasses, xxs.; for 2 drinckinge glasses, xd.; for 2 viall glasses for vinegar, of Venice glass, iijs.

1633.—*Utensiles and Necessaries.*—For one glasse bottell, covered with leather, to put orenge flower water in xviijd.; for one Kanne glasse for my Lord, vd.; 3 beare glasses, xvd.; one wine glasse xijd.; for glasse bottells, iijs.; do. do. vjd.; for 2 glasse bottells covered with leather, ijs. iiijd.; for 12 drinkinge glasses, vs.;

Extraordenary Payments.—For 2 litle glasse bottells of orenge flower water for my Ladie, xiiijs.; one peece of seaglasse, vjs.[4]

[1] *Surtees Society*, vol. lxviij. 1877.

[2] A wooden or wickerwork receptacle for glasses, perhaps serving the same purpose as a "glass cupboard." [Provisional definition.]

[3] Probably a glass bottle with cordial water.

[4] Amber.

No. VII.—1620.

Extracts from the Inventory of the Household Effects, &c., of Dame Dorothy Shirley at Farringdon, Berkshire, Sept. 20, 1620.[1]

Damaske.—iiij glasse cloathes, whereof one is diaper.

In my la. Closett.—One case of glasses, one steele glasse,[2] wt^h^ divers other glasses, purslin stuffe, Chinie stuffe.

In the *Butteryc.*—One glasse cubberd.[3]

No. VIII.—1624.

Extracts from the Inventories made for Sir William and Sir Thomas Fairfax.[4]

Sir William Fairfax, at Walton, April 3rd, 1624.

In the Still House.

Fower stills, a seller for glasses, two shelves, & thre in the wall all full of glasses with distilled waters.

In my L. Closet.

. . . glasse plates, drinking glasses & glasse bottles, . . .

In the Presse in the outer Nursery.

Cheney dishes, gally potes, glasses and boxes furnished with sweet meates.

Sir Thomas Fairfax, at Gilling, June 22, 1624.

. . . one glasse vinegar crewett, seaven glasses without feet, . . .

[1] The *Unton Inventories*, Berkshire Ashmolean Society, 1841.

[2] Glasses called Steele-Glasses are made of three parts of brass, of one part of tin and silver, and an 18th part of antimony. Most leave out the silver for the charge, others add onely a 24th part. Some make it of a pound of tin, a third of brass melted, and then add an ounce of tartar, and half an ounce of white orpimont, all boild so long as they smoak. Then they fashion the molton metal into the figure of a Looking-Glass, on plain tables, heated and dryed with the smoak of Rosin, and smoothed with vine ashes, then they afterwards smooth it glewed to wood, with water and sand, next with emery, or a smooth pumice, thirdly with putty,—that is, calcined tin.—*The Art of Glass*, by Antonio Neri, 1612; English Translation by T. Merret, 1662, p. 342.

A long list of Stele Glasses of great beauty are included in Henry VIII.'s Inventories of 1542. It is printed in the *Archæological Journal*, vol. xviij. p. 138. Gascoigne, the author of *The Princely Pleasures of Kenilworth Castle*, wrote a satire called *The Steele Glasse*.

[3] A glass cupboard was probably a wooden box, with shelves and a glazed door, containing a series of choice glasses for use or ornament. In one of Howell's Letters, dated Westminster, 15th Jan. 1635, the author writes this to Mr. T. Lucy in Venice: "My Lady *Miller* commends her kindly unto you, and she desires you to send her a compleat cupboard of the best chrystall glasses Murano can afford, by the next shipping."—*Familiar Letters*, vol. ii. p. 40, 2nd Edit. These were glasses of rare and curious sorts allowed to come free by the Proclamation of Feb. 25, 1620, until May 22, 1623, when importations were left open. In 1626 Sir Isaac Wake sent chests of glass from Venice to the Duchess of Buckingham.—*State Papers*, Domestic, 211, 90.

[4] *Archæologia*, vol. xlviii. p. 121.

No. IX.—1625.

Extracts from the Inventory of the Goods and Chattels of Edmund Waring, of Wolverhampton, Esq. Taken after his decease in 1625.[1]

At the Lea, Wolverhampton.

In the Closet within the Kytching Chamber.

Imprimis glasses glase bottels trenchers.

At Leacroft, Cannock.

In the Kitchine Chamber.[2]

. . . . Potts glasses way schales and such like implements.

In the Closett in the Porch.

. . . a glasse box tow glasse bottles in it . . . glasses bottles baskettes with other small Implements of like sorte.

The Lower Closett at the greate Stayrefoote.

. . . one glass box.

No. X.—1649.

Extracts from "A true and p'fect Inventory of all the Plate, and Jewells now being in the Upper Jewell House of the Tower, in the Charge of Sir Henry Mildmay, together with an appraisem^t of them made and taken the 13th, 14th, and 15th daies of August 1649."[3]

	£	s	d
One white glasse cann garnished with silver gilt, valued at . . .	1	0	0
One glasse spout pott bottle garnished with silver gilt, valued at . .	2	0	0
. . . a broken glasse cup garnished with silver gilt, an old red glasse bottle, a piramide blew glasse bottle garnished with silver gilt . . . (with other items) all sett all together in a close stoole and valued at .	10	0	0
A blew glasse bottle garnished with silver, valued at . . .	0	15	0
A christalline glasse and cover, garnished with wyer work of gold p. oz. 20 oz. valued at	50	0	0
A great glasse cupp and cover garnisht with gold, enammelled greene on the topp, p. oz., 1^lb 10 oz. vallued at	22	0	0
A large christalline beere glasse, garnished with gold, valued at . .	6	0	0
A long footed greene glasse case cuppe, standing on a flower de luce, with a cover garnished with gold, 3 great pearles of the topp of the cover, p. oz. 22 oz. valued at	20	0	0
2 Christall wine glasses cracked, garnished with a little gold valued att .	1	10	0
A greene glasse pott garnisht with gold, and a collar of pearle about the neck, valued at	20	0	0
A tunn christal glasse garnisht wth gold enam'elled about the topp and bottome, valued at	6	0	0
A broken christal glasse with a flower de luce on the topp, valued at .	1	0	0

[1] *Proceedings, Soc. Ant.*, 2nd S., vol. vi. p. 363.

[2] In this Chamber are mentioned "a Chynay boule with thirteen pieces more of Chynay stuff."

[3] *Archaeologia*, vol. xv. p. 274. These *Extracts* comprise the objects in glass only.

A large christal wine glasse with a broken cover, valued att . .	£10	0	0
An oval christall wine glasse, crasted,[1] garnished, and sett with rubies and opalls, valued att	3	0	0
A silver gilt cover with a blew glasse in the midst of the inside, and an amatist in the topp of it, valued at	1	0	0
A foot for a glass . . . (with other things) valued at . . .	13	10	0
2 cann glasses, one broken, garnisht in the bottome with silver gilt, p. oz. 23 oz. valued at	1	0	0
From "the Inventory of that part of the Regalia which are now removed from West[r] to the Tower Jewel House." One large glass cup wrought in figures and sett in gould, with some stones and pearles, formerly called an aggatt cupp, p. oz. 68 oz. ½, valued at 1£ 10[s] p. ounce . .	102	15	0

No. XI.—1731–1738.

EXTRACTS FROM AN ACCOUNT BOOK OF AND IN THE HAND OF FRANCIS SITWELL OF RENISHAW, FROM AUG. 20, 1728, TO MARCH 2, 1748.[2]

1731.	Feb. 2. Paid Rich Dixon a Bill for bottles, Water Glasses &c. .	£2	17	5
1733.	March 12. Paid Richard Dixon a Bill for Glasses, Bottles, &c. .	3	4	3
1734.	July 25. 2 glasses	0	2	0
„	Nov. 7. Richard Dixon was paid for Wine he bought for me at Doncaster, & for glasses &c. as by Bill	3	11	6
1735.	Mar. 12. I then paid Rich. Dixon a bill for Bell Glasses,[3] Gelly-Glasses, Glass petty pans, 13 flint glasses &c. . . .	1	0	1
1737.	Sept. 19. Paid William Dixon Bill for Glass amounting to Eleven shillings.			
1738.	April 10. I then paid Will. Dixon for eight water glasses, 4[d] a piece .	0	2	8

WHITTINGTON GLASS HOUSE, NEAR CHESTERFIELD.

BILLS FOR GLASS.[4]

S. Sitwell Esq. to John Dixon Dr.

1791. June 6th.	10 neat Rodney Quart Decanters cut ring necks & finger Bott[ms], 6/	£3	0	0
	2 doz[n] finger Cups cut Bott[ms], 20/	2	0	0
	4 doz[n] neat plain Wines, 5/6	1	2	0
	4 doz[n] do „ Claret, 6/6	1	6	0
	2 doz[n] ½ Pint Tumb[rs] cut Bott[ms], 8/	0	16	0
	2 Glass Funnils	0	0	8
	Berry Bottles	0	7	0
1793. July 18th.	6 neat cut neck ring Rodney Decant[rs] at 6/ . . .	1	16	0
Oct. 26.	a cut Shandilere for Candle	0	5	0
Nov[r] 23.	10 sorted Glasses fitted to silvers, 1/	0	10	0
		£11	2	8

Received 11 Dec[r] 1794.

[1] Crasted, crazed, cracked; a "christall wine glasse" may possibly imply a cup of rock crystal, particularly when set with precious stones.

[2] In the possession of Sir G. R. Sitwell, Bt.

[3] ? For garden use.

[4] From the collections of Sir G. R. Sitwell, Bt.

1795. Jany 31.	1 doz^{n} ½ Pint Gobletts	£0	8	0
	1 doz^{n} ½ Pint Tumblers cut Bott^{ms}	0	8	6
	21 handled Orgeat Glasses, 6d.	0	10	6
	1 doz^{n} Pint Water Decanters	0	12	0
	1 large Stair case Lamp Glass	0	10	6
Feby 9th.	2 Epurgne Saucers fitted to Silver	0	4	0
	2 small size Chimney Lamps	0	0	10
	2½ Pint Water Decanters cut Bottoms	0	1	6
March 28th.	25 plain clarett Glasses to Patt^{n}, 7d.	0	14	7
July 25th.	4 neat cut neck ring Rodney Quart Decanters	1	4	0
	1 doz^{n} ½ Pint Tumblers cut Bott^{ms}	0	8	6
Augt 29th.	22 Bell shape shade Glasses, 1/4	1	9	4
Septr 16th.	31 Old Hogsheads for Palacading, 1/	1	11	0
Oct. 29th.	39 best wine Glasses cut with shears, 6/	0	19	6
	40 best Clarett Glasses, 7/	1	3	4
	1 doz^{n} Qua^{r} Pint Tumblers cut Bott^{ms}	0	3	6
	1 doz^{n} half do do do	0	8	6
	1 doz^{n} ½ Pint Gobletts	0	8	6
	16 handled Lemonade Glasses, 6d.	0	8	0
	4 Ounces Frosting, 5/	0	1	3
	Crate	0	1	6
Decem^{br} 24.	7 white Oval Salt linings fitted to Silver, 9d.	0	5	3
31.	4 Chimney Lamps, 5d.	0	1	8
	A Lamp with foot	0	0	10
	A large Goblett fluted bole and Lettered "Success to Renishaw hair hounds"	0	1	6
		£12	6	7

April 9th 1796.
Sett^{d} by Draft
rec^{d} of Mr. Morland.
J. Dixon.

	Account delivered from April 1796 to Novr. 6th 1797	£9	1	6
1798. Jany 28.	Glass as p^{r} Invoice sent	1	8	10
Sepr 29.	1 doz. ½ pint Tum^{rs} cut Bott^{s}	0	8	0
	1 doz. pint Water Bottles	0	12	0
	Basket	0	0	10
Novr 3^{d}.	8 Small Letter'd Cruits, 10d.	0	6	8
	15 Large do. 1/3	0	18	9
		£12	16	7

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A. H.

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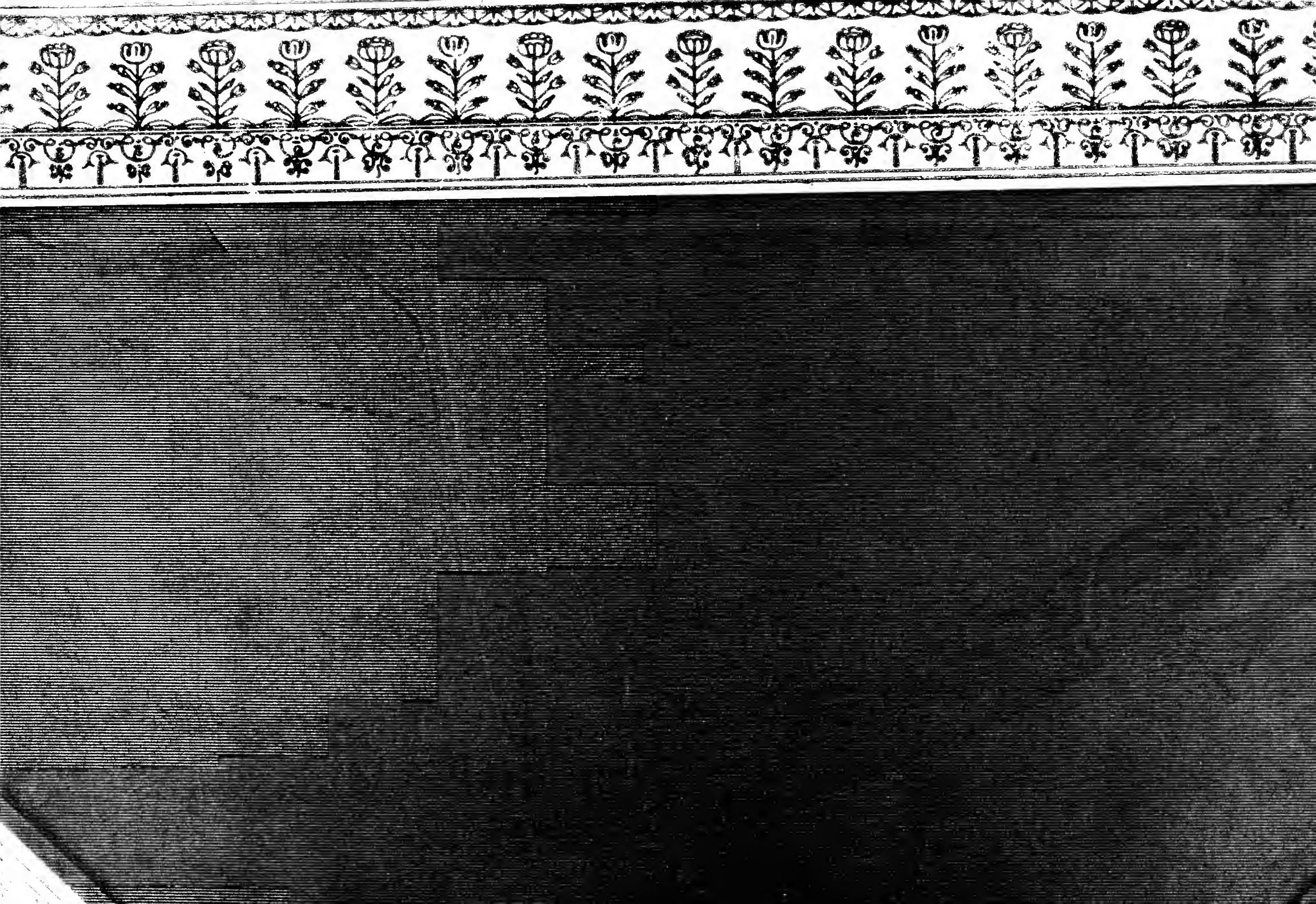
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